

**EXPLORING THE ECOSYSTEMIC
VARIABLES IN THE IMPLEMENTATION OF
A STUDY AND THINKING SKILLS
PROGRAMME**

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DECLARATION

I, the undersigned, hereby declare that this study project is my own original work, and that I have not previously in its entirety or in part submitted it at any university in order to obtain a degree

Signature

Date

SUMMARY

This study was undertaken with the view to explore the ecosystemic variables that may impact on learners' acquisition and generalisation of the study and thinking skills that they have been introduced to. In addition, my own journey of growth as a reflective practitioner has been recorded.

A literature review was undertaken in order to obtain a perspective of research conducted in this field. I fulfilled the dual role of researcher and reflective practitioner which enabled me to use both the 'objective knowledge' gained from the literature review and my 'personal knowledge' which resulted from teaching experience. I selected the ecosystemic framework as the preferred educational psychological framework with which to approach this study.

The nature of this research study is post-modernist, phenomenological and emancipatory. I have taken a qualitative stance in an attempt to explore, firstly, the learners' impressions of the usefulness of the programme and secondly, the variables that may be impacting on the learners' ability to acquire and generalise new strategies. The information has been gathered from my observations and questionnaires.

The research report describes my observations of the ecosystemic variables that affected the implementation of a study and thinking skills programme, and the learners' impressions of the programme. In addition, I reflected on my journey through this research process. Suggestions were made as to how a study and thinking skills programme could best be implemented in a school; and as to the usefulness of emancipatory action research in South Africa.

OPSOMMING

Hierdie navorsingsprojek is onderneem met die oog daarop om die ekosistemiese veranderlikes te ondersoek wat 'n invloed het op die opname en veralgemening van studie-en denkvaardighede waaraan leerders blootgestel is. Tesame hiermee is my persoonlike groeiervaringe as reflektiewe praktisyn ook aangeteken.

'n Literatuuroorsig is onderneem ten einde 'n perspektief te verkry van navorsing wat reeds in hierdie gebied onderneem is. In hierdie proses het ek die gesamentlike rol van navorser en reflektiewe praktisyn aangeneem. Dit het my in staat gestel om die 'objektiewe kennis' verkry uit die literatuuroorsig met die 'persoonlike kennis' opgedoen tydens my onderwyservaringe, te kombineer. Ek het die ekosistemiese raamwerk as 'n geskikte opvoedkundige sielkundige vertekpunt vir hierdie studie gekies.

Die aard van hierdie navorsingsprojek is postmodernisties, fenomenologies en emansipatories. Ten einde die leerders se indrukke van die program en die veranderlikes wat hulle vermoë om die nuwe vaardighede op te neem en te veralgemeen te bepaal, is 'n kwalitatiewe benadering gevolg. Hierdie inligting is ingesamel deur middel van my eie observasies sowel as vraelyste.

Hierdie navorsingsverslag beskryf my observasies van die ekosistemiese veranderlikes wat die implementering van 'n studie- en denkvaardighedsprogram, sowel as die leerders indrukke daarvan, geaffekteer het. In toevoeging hiemee, het ek ook oor my persoonlike ervaringe gedurende die navorsingsprojek gereflekteer. Voorstelle is gemaak oor die mees geskikte wyse waarop so 'n program in 'n skool geïmplementeer kan word, asook ten opsigte van die bruikbaarheid van die emansipatoriese aksienavorsings-benadering in Suid Afrika.

***This study is dedicated to the two men in my life:
My much loved partner, Michael MacLachlan,
And in memory of my beloved father, Michael Aitken***

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CHAPTER 1

FOCUS AND FRAMING

1.1 FOCUS OF RESEARCH

The main focus of this research is to explore the ecosystemic variables that may impact on learners' acquisition and generalisation of the study and thinking skills strategies that they have been introduced to. Most research into the efficacy of study and thinking skills programmes has been researched quantitatively. In order to provide a different approach, as advised by Burden and Nichols (1997), I have taken a qualitative stance in an attempt to, firstly, consolidate the learners' impressions of the usefulness of the programme and secondly, to investigate what factors may be impacting on the learners' ability to acquire and generalise new strategies. This research study is essentially exploratory in nature and therefore broad-based, covering a wide range of issues. My intention is to generate a wide range of issues, which otherwise might have been missed in a focused, in-depth research strategy. I hope that the exploratory and qualitative nature of this research may raise issues that are worthy of future research, and may provide some explanation as to why some learners are able to apply these strategies effectively and others are not. This will enable the creation of future hypotheses or programmes to address issues that are identified or confirmed within this research study.

1.2 FRAMING OF RESEARCH PRESENTATION

The nature of this research study is post-modernist, phenomenological and emancipatory. For me, this means that there is no one truth, and no expert role; therefore all knowledge is subjective in nature. My theoretical grounding views the choice of research study as a subjective decision, and one that is often informed (and financed) by political and social agendas. It is therefore, in my view, a form of hypocrisy to write this assignment in the traditional, objective format as it negates and makes mockery of my epistemological stance. For this reason, this research has been written in the first person in an attempt to reflect my own subjectivity and where my own viewpoints differ from the objective (sic) body of expert knowledge (Griffin & Phoenix, 1994). Similarly, I want to ensure that my writing is not

gender-biased (Griffin *et al.*, 1994). For this reason, I have attempted to refer to 'learners' rather than 'learner' in my own writing, to avoid using the gender pronouns. It is hoped that the reader will respect my need to remain true to my own worldview and not to compromise my research findings by paying lip service to modernist, positivist formats.

1.3 REASONS FOR RESEARCH FOCUS

I wish to acknowledge at the outset that my interest in this field has been stimulated, in true action research style, by my own previous research. I do not feel that this compromises the declaration of originality (p iii).

I have been involved in teaching study and thinking skills for four years. A requirement of my Psychology Honours Degree was a mini-project for which I researched the 'Effects of Study Skills Intervention on Academic Self-concept'. The majority of learners showed a significant improvement in academic self-concept, but some learners did not. This led me to discuss, with the learners that attended the courses (approximately 1700 learners from the Western Cape area over a 4 year period), factors that prevented them from applying and maintaining study skills, and that caused them to become demotivated about academic studies. The consistency of the factors raised by the learners over a four-year period continues to fascinate me.

I have grouped the factors raised by the learners according to the different systems in which they are located (learners, parents, school, community and society).

Learners reported feeling disempowered by the fact that there were no systems in place to enable them to appropriately express their dissatisfaction. They complained that they had to resort to subversive tactics such as non-compliance, passive resistance or vandalism in order to feel empowered, or to make themselves heard.

The familial system also generated difficulties. Learners mentioned aspects such as a lack of parental involvement, interest or understanding in the learning process. They often felt that their parents' expectations of their abilities were too high or too low and that their parents lacked an understanding of their needs. Aspects of family discord such as divorce, family abuse (wife and child battering) and alcoholism were frequently raised. The learners were often very angry about the lack of positive reinforcement from parents and teachers for

desired learning behaviours and an over reliance on the use of punishment in order to extinguish inappropriate behaviours.

The learners did not consider schools to be places of safety, and reported much abuse of power by teachers (verbal, emotional and physical). Many of the learners complained of sexual harassment and rape by teachers. Teachers were reported as being underqualified and ill equipped, uninterested in the education process, or even failing to report for work. The learners felt that many teachers used poor teaching methods, applied little effort and lacked commitment to the learning process. Most learners cited inadequate facilities, such as overcrowded classrooms, no science laboratories no textbooks or notes and in some cases, no toilets.

Social and community factors were also raised. Communities are under stress and are often plagued by poor socio-economic conditions and gang violence. Many learners were affected by the gang violence in their communities and reported not knowing whether they would still be alive at the end of the day. Some of the communities lack suitable role models to provide the learners with motivation. The learners felt that the national curriculum lacks relevance and this has led to increasing levels of boredom, frustration and anger. They reported that with the socio-political upheaval and high levels of unemployment there was no point in learning as it was unlikely that they would find employment.

The fact that these issues were continuously raised by learners of diverse backgrounds and that many of these issues have been validated through research studies, is a sad indictment of the quality of education in South Africa and the schooling conditions that the majority of the children of our country have to endure. Indeed, I find it truly amazing that so many of our learners actually survive the school system. I have found myself becoming increasingly passionate about finding ways to improve the current situation in South African education.

While I have undertaken no formal research to back my personal understanding and findings, they play an important role in determining the direction of this research study. McNiff's (1993) understanding of Michael Polyani's work, *Personal Knowledge* written in 1958, motivates her distinction between personal knowledge and objective knowledge in educational research. Objective knowledge is that knowledge that society values and has made an explicit body, but personal knowledge requires "the need for personal commitment in any act of knowing. To speak with any sort of sense ... I have to accept that I am an active

knower" (Polyani, 1958, as cited in McNiff, 1993:26). Therefore, McNiff (1993) argues that educational research needs to start with the subjective knowledge of the teacher-as-researcher (this argument is further elaborated on in Chapter 3: Methodology). Supplementary support for my personal knowledge can be found in policy documents and other research regarding the current state of affairs in South African education (Engelbrecht, 1999, 2001; Naicker, 1999; NCSNET, 1997; NCESS, 1997; NEPI, 1992; Wallace Adams, 1996).

1.4 VARIABLES WITHIN THE LOCAL CONTEXT

The accurate interpretation of research findings, within the emancipatory paradigm, necessitates clearly delineating the context of the research process to enable the readers to understand how the research was affected by the context (including myself-as-researcher) and how this affected my interpretation of the findings (Firestone, 1987; Mertens, 1998; Parker, 1996). This process also enables readers to assess the validity of the findings and hypothesise their own alternatives. I have attempted to describe the local context within which my research took place. It is important to realise that in many instances this local context is seen through the lenses of my own belief systems, expectations, prejudices and stereotypes. For this reason I will begin this section with a brief description of my own belief system; please note that this will be further expanded upon in Chapters 2 and 3.

1.4.1 Myself-As-Researcher

My overarching epistemology is post-modernist, phenomenological and emancipatory. For me, this means that knowledge is relative, and is socially constructed (Firestone, 1987; Mertens, 1998; Parker, 1996). I view knowledge or social belief systems to be contained within language which is formed into stories or narratives that inform the beliefs, actions and regulatory systems of the individuals within the communities (Banister, Burman, Parker, Taylor & Tindall, 1996). I see the 'self' as being constructed in social interaction, which describes, explains and accounts for our world and our position in it. If there is no essential truth, then there can be no expert role, instead there needs to be collaboration and negotiation of mutual goals that meet the needs of all stakeholders (Burman, 1994; Griffin *et al.*, 1994). As myself-as-psychologist or as myself-as-researcher, I need to take cognisance of my professional and cultural assumptions about my clients (the learner's) and how this affects them and in turn the process of collaboration (intervention) (Banister *et al.*, 1996; Griffin *et al.*, 1994). External conversations become internalised stories and life frameworks for both

therapist and clients, these stories organise what we see and how we interact with our clients therefore self-reflection is crucial; as our reactions invite client reactions, which can develop into repetitive interactions.

Thus self-reflection and self-awareness are essential when myself-as-researcher attempts to organise what I see in the local context. As mentioned in the previous paragraph an essential dimension of my epistemology is that of emancipation. This paradigm moves further than the previous phenomenological or constructivist paradigm in four essential ways (Mertens, 1998). Firstly great importance is placed on the experiences and lives of marginalised groups and emphasises how myself-as-researcher must focus on how the lives of marginalised groups are constrained by the actions of the oppressors. This involves exploring oppressive actions used by either individuals or groups; and on the strategies marginalised groups use to resist and challenge oppression (Mertens, 1998). Secondly, my role is to analyse how and why these inequalities (whether they be based on gender, ethnicity, race, disability) are revealed in unequal power relationships (Mertens, 1998). In this present research two areas of marginalisation that will be examined is that of educational professionalism (demoting parents from their role as experts-of-their-children); and educational democracy (whereby both learners and parents are disempowered through the traditional hierarchy of authority within the education system). Thirdly, I need to reflect on how research is linked to social and political action (Mertens, 1998). Fourthly, my approach to my research and the development of the study and thinking skills programme needs to be emancipatory in approach (Mertens, 1998). Therefore my understanding and description of the local context of the research process will be viewed through the above belief systems.

1.4.2 Choice Of Context

The choice of context was dictated by personal constraints. As I was working full time and studying part-time, the choice of a more suitable context was not a luxury that I could afford. I was employed by a government school (boys' primary school) of great tradition and reputation specifically to develop and manage a study and thinking skills programme. The Principal required that each class from Grade 4 to Grade 7 receive study and thinking skills intervention once a week for an hour, for the first semester. In the second semester, this hour would revert back to the traditional guidance session. The Principal believed that the reason why so many of the boys were underachieving was because they lacked the necessary study and thinking skills to maximise their academic potential.

I thus chose to base my research within this context.

1.4.3 Ecosystemic Description Of Context

The school is located in one of the wealthiest suburbs of Cape Town, which is demographically predominantly white. The community takes great pride in and is involved in the activities of the school. This school is not representative of the majority of learning contexts in South Africa with regard to such aspects as demographics, access to resources and historical tradition. The racial demographics of the school represented the community but not the Cape Town area as a whole. This is a boys' school with a long history of tradition and it is extremely well-resourced in comparison to the majority of South African schools (due to an extensive 'old boy' network and its advantageous position during Apartheid years). The admission selection process is based mainly on academic and sporting ability. The school does not seem to be inclusive.

The Principal has an 'open door' policy that includes both learners and staff, and parental involvement in the running of the school is encouraged. There is a school representative council as well as the usual 'prefect' system. There are high levels of interaction and competition with other schools of similar background and the school has a 'brother' school in a disadvantaged area. There is much collaboration between the two schools.

Staff commitment is of a high level and they work well together as a team. Teachers seem to be selected according to levels of expertise, experience and commitment to self-growth. Many of the teachers were involved in post-graduate studies that aimed at improving their professional development. There is a good range between new or first year teachers and teachers who have many years of experience. The school has good remedial and learning support staff. The classes are small (20-25 learners per class) and the majority of classrooms were arranged in the traditional 'rows of desks' layout; only three classes used a group format. There was a high level of discipline and control imposed on the learners.

Parents were involved in many facets of the school life, such as family camping weekends and fund-raising. They were encouraged to become part of the school and visit regularly. Some parents were even involved in baby-sitting classes when teachers were sick.

It was within this context that I proceeded to explore the research problem that I had chosen.

1.5 THE PURPOSE OF THE RESEARCH

This section outlines the nature of the study with a description of the research problem and the methodology used.

1.5.1 The Research Problem and Approach

My research study is exploratory and qualitative in nature and I intend to explore the variables that may impact on the learners' studies (as reported by the learners and my own observations) and their impressions of the efficacy and usefulness of the study and thinking skills programme. I propose to work from emancipatory and ecosystemic perspectives in the hope of generating a broader understanding of the factors that may be causing underachievement in South African learners. It is hoped that such understanding will facilitate the development of interventions that will enable the empowerment of learners, teachers and parents to become actively and collaboratively involved in the learning process. A broad focus will hopefully raise factors or issues that may have been missed in previous positivist, narrow-focused research studies.

The research problem that has been formulated is:

How do the learners' ecosystems interact and impact on the acquisition and generalisation of study and thinking skills; and to what extent is this situation effected by unequal power relationships between and within the ecosystems?

This broad research problem can be further broken down into the following questions:

- What factors within the learners' ecosystems impact on the development of study and thinking skills?
- Are the teachers prepared to become involved in facilitating the development of these skills?
- Are schools prepared to instigate collaborative processes with parents to further the development of the learners – necessitating a move away from the role of sole 'expert' to 'joint expertise'?
- What problems will be encountered in ensuring participatory action research within the school environment?

- How realistic is emancipatory research within the current school climate?

1.5.2 Participants and Data Collection

The Grade 7 learners (72 learners) were the participants in this research study. In accordance with the phenomenological approach of this study, the emphasis was on the collection of qualitative data of an ecosystemic nature that reflects the participants' attitudes, issues and values with regard to their social contexts; and their views on the efficacy of the study and thinking skills programme. Questionnaires using both open- and close-ended questions were used. In addition, my observations as my role as researcher-teacher have been included.

1.5.3 Research Process

The methodology of research that has been chosen by this researcher is Emancipatory Action Research. This methodology of research combines this researcher's different areas of interest; as emancipatory action research is concerned with power relations between researcher and researched, and the rights of the individual. Current practice in action research views the researcher and participants as equal in status and emphasises the participants' right to speak and have their views seen as central to the research enterprise. Communication between participants is actively encouraged (Hart, 2001).

At the outset my aims were essentially twofold. Firstly, I wanted to ensure that the intervention was a success for the school, and that at the end of the programme I would be able to advise the Principal on possible directions to take the programme in order to maximise its effects on the learners' development. Secondly, I wanted to broaden and deepen my understanding of the process from the learners' perspectives. I had many personal theories, and academic theories regarding the process; but very little in the way of feedback and understanding how the learners viewed the process. I wanted the learners' perspectives regarding how such a programme impacted on them.

Knowing at the outset that the project would only take place in a limited time frame, that of 6 months, I was faced with the dilemma of choosing the research direction. As I saw it at the time, I could either investigate a few learners in depth, resulting in a narrow, but deep research style; or I could choose to get a broad, and inevitably shallow, perspective of the intervention. I opted for the latter. My reasoning for this was that firstly, I was not sure if going deep, without a preliminary, broad study was advisable. I was concerned that delving

deeply too soon could blind me to other dynamics. My interest in ecosystemic theory made me very hesitant to go narrow without a broader understanding of possible inter- and intra-system dynamics to inform further research. Secondly, I wanted to be able to 'advise' the Principal of future directions and changes that could be made that would benefit the majority of the students. Thirdly, I realised that this is an area in which I would like to continue to research and develop throughout my professional career; and therefore it would make more sense to go broad now, thus better preparing me for narrow-focused research at a later stage in my professional development.

The first step was then to decide the type of research that I would undertake and the basic outline of the research. My readings and personal belief systems, as outlined in Chapter 3, led me to emancipatory/participatory action research. This process made sense to me, and I appreciated the initial broad focus that would/could then spiral into other research areas.

The second step then was to compile the intervention as outlined in Chapter 3. I gave the teachers a questionnaire, which listed most of the well-known areas for study skills development and asked them to indicate which areas they felt were most appropriate or needed. I used this, my personal experience and current research to compile the study and thinking skills course.

The third step, for me, was to create a basic research plan for accessing data. While investigating this, I encountered an interesting (for me) personal dilemma. On the one hand I wanted qualitative information that would allow me greater empathic understanding; on the other hand I wanted quantitative statistics that indicated the extent to which the learners changed their learning strategies after the programme. Thus the initial planning focused on 2 questionnaires (pre- and post intervention), which would consist of both open- and closed-questions. In addition, true to action research style, I decided to use opportunities as they arose to create further research data.

1.6 THE SIGNIFICANCE OF THE STUDY

With the current crisis in education in South Africa, it seems imperative that ways are found to maximise the latent potential of our students. Increasingly, educational research is focusing on improving the academic achievement of learners through empowering them to become active and independent learners. It is becoming increasingly important that students develop

the cognitive and metacognitive strategies that will enable them to become self-regulating learners.

My interest in using ecosystemic, phenomenological and emancipatory perspectives has made me critical of the seemingly reductionist research studies that have generally been undertaken. These studies generally locate the problem within the individual or the school and advocate specific reductionist interventions in those areas. Except for some studies in the whole school approach, few researchers seem to be conceptualising a holistic, multi-pronged skills intervention that aims at empowering all roleplayers within the learning situation, namely learners, teachers, parents, extended family members etc. My view is that the education system in South Africa (if not world-wide) needs serious reconceptualisation that involves a total paradigm shift, not just a reinvention of the status quo. In the interim, however, learners, families, schools and communities need to be empowered to cope with an education system in crisis.

I feel that the significance of my study is that, by making an initial foray into emancipatory action research, I will not only enable myself and others to formulate holistic programmes; but even more importantly allow the marginalised people within education - learners, parents and to some extent teachers - to find their voices and use them to create an education system that truly meets the needs of the South African people.

1.7 KEY CONCEPTS

A brief discussion of the key concepts contained within the title of this study needs to be undertaken at this stage. The concepts that will be discussed are 'ecosystemic variables' and 'study and thinking skills programme', which will be elaborated on further in Chapter Two. It is important that the reader is aware of my understanding of these concepts in order to facilitate the reading of this study.

The phrase 'ecosystemic variables' is used to encapsulate the concept of multiple, mutually interacting systems that contain factors (variables) that impact either positively or negatively on the individual located within those systems, who in turn impacts on those same systems.

The phrase 'study and thinking skills programme' refers to my development of an intervention that intends to improve the learners ability to self-regulate and improve their ability to learn

what is required of them at school (and ultimately life); and to improve their ability to think broadly and deeply about aspects of school or life that concern them. The development of this programme was based on my personal experience and current research.

1.8 STRUCTURE OF THE STUDY

The study skills section was comprised of memory techniques (visualisation and association), muscle reading (a technique that facilitates comprehension and understanding), mind mapping and column method notes (summarising techniques).

The thinking skills section focussed on Edward de Bono's lateral thinking tools, namely: CAF, PNI, C&S, OPV.

In **Chapter One** I sought to orientate the reader through providing my motivation, and conceptualisation of the research study. I described the problem and the research process, and have clarified the key concepts as they appear in the title. I have discussed the relevance of this study within the South African context. My style of writing has also been explained.

An overview of literature relevant for this study is provided in **Chapter Two**. I discuss how my role as an educational psychologist informs my practice as a teacher. I make explicit my ecosystemic perspective that encompasses the power dynamics highlighted by critical psychologists. This leads on to a delineation of my philosophy of education, which is essentially constructivist, democratic, inclusive, outcomes-based and whole school in approach. I explain my role of reflective practitioner. The ecosystemic variables that impact on learners are discussed and then located within the South African context. Finally, possible intervention strategies are explored.

In **Chapter Three** I attempt to give a detailed description of my journey of methodology exploration to provide the reader with an understanding of why I conducted this study in the way that I did. This philosophical rationale provides my understanding of qualitative, emancipatory and action research. This is again located within the South African context and its relevance to teacher research is made explicit. I describe the research process in detail, including my position as researcher, the participants and the methods used to capture and analyse data. Lastly, I discuss the rigour, validity, limitations and ethical issues of this research study.

The themes of the study are constructed in **Chapter Four**. I set out my observations and reflections within an ecosystemic framework, based on my personal observations and the learners' responses to the open-ended questions. The second part of the analysis consists of the learners' responses to the programme. This section consists of three parts, firstly, a thematic analysis of their written responses about the programme (Questionnaire 2: open format questions). Secondly, a statistical analysis of their rating of the different modules according to their perceived usefulness. Finally, a statistical analysis comparing pre- and post-intervention habits of the learners.

Chapter Five provides the reader with my concluding comments, which revolve around an ecosystemic summary of the 'personal' knowledge that I have gained through this study. I formulate a response to the research problem raised in Chapter One. In conclusion I discuss the implications of this study and future actions that could be taken.

CHAPTER 2

LITERATURE REVIEW

2.1 LITERATURE REVIEW FRAMEWORK

It is necessary to have an understanding of the researcher's situation and belief system as well as the context in which the researcher and participants are situated in order for the reader to fully understand the dynamics of the research process and the relevance of the findings. In order to do this, I will first outline my philosophical rationale with regard to psychology and education, in order to assist the reader in locating my research within its theoretical grounding. Following this I will briefly outline the current challenges in education, both internationally and within South Africa, that have given rise to the focus on metacognitive education. I will explore current research on the variables that impact on learners and attempt to provide an ecosystemic framework. Finally I examine the implementation of metacognitive and cognitive strategies to enhance study and thinking behaviour.

2.2 MY ROLE AS AN EDUCATIONAL PSYCHOLOGIST

I have spent the last two years in my training as an Educational Psychologist investigating and developing a psychological framework that will enable me to assess, understand and intervene in a variety of situations that may be brought to my attention. A brief examination of my psychological framework is important as it informs my educational practice. I found myself particularly drawn to two particular areas, namely ecosystemic theory and critical theories.

2.2.1 Ecosystemic Perspective

The ecosystemic perspective moves away from a reductionist approach that focuses solely on one aspect, for example, either the intrapsychic processes or the family dynamics. Instead this approach attempts a holistic understanding of the individual by examining the different systems in which the individual occurs as well as the different systems that occur within the individual. "Its main concern is to show how individual people and groups at different levels

of the social context are linked in dynamic, interdependent and interacting relationships" (Donald, Lazarus & Lolwane, 1997:34). In other words, the individual cannot be seen in isolation from the context, as the individual is part of the context, being affected by it and in turn affecting the context (O'Connor & Amen, 1997). The context in which an individual is situated is complex and consists of many relationships on different levels. The causes of illness, disorders or social/emotional difficulties often can be found in the wider context of the individual, rather than within the individual alone. "Thus, ecosystemic diagnosing provides multilevel opportunities for appreciating system functioning and for choosing interventions" (Combrink-Graham, 1987:510). Similarly, O'Connor *et al.* (1997:6) posit that *"the development of our intrapsychic systems cannot emerge independent of interactions with others in our personal systems"*. Therefore, it makes sense to explore the context of the individual rather than focusing solely on the individual.

Keeney (1979) provides an excellent overview of the ecosystemic paradigm's use in diagnosis. In this article Keeney (1979, 126) argues that "one does not purposively seek information in any strict programmed format but one becomes receptive to experience ... this way of diagnosing or knowing shifts constantly and does not constitute a separate component of the therapeutic process". Thus, intervention and diagnosis are intertwined and inseparable, as one learns more information, one's intervention changes which in turn leads to new information.

It is important to note here that the ecosystemic approach is not a deficit model. In other words the psychologist does not just use the ecosystems to 'find out what is wrong', but also focuses on strengths and resilience factors that may be used in intervention.

Based on the ecosystemic diagnosis the psychologist is thus able to intervene at any systemic level or subsystem whether it be intrapsychic or within the family, peer or school systems. In addition the ecosystemic model allows psychologists to intervene in macrosystems at social and political levels, rather than just remaining in the traditional individual or family systems. This means that the intervention can be therapy, education, consultancy or advocacy depending on the ecosystemic needs of the client. Because the ecosystemic model views the diagnostic and intervention processes as simultaneous, the psychologist has the flexibility to change the techniques used, or the level at which the intervention takes place, not because they have an ad hoc 'gut feel', but because the ecosystemic analysis provides good reasons to do so.

One area that the ecosystemic approach seems, to me, to neglect is the hidden, taken-for-granted power dynamics that are present in most relationships. If these power dynamics are not made explicit and confronted, I do not feel that a true ecosystemic analysis is possible.

2.2.2 Critical Psychology

Critical psychology enables a psychologist to be aware of the socially constructed nature of knowledge and the inherent power dynamics involved in the construction of knowledge. Critical psychologists dispute the concept of a knowable, universal 'truth' (Bannister *et al.*, 1996; Burman, 1994; Burman, 1987; Rappaport & Stewart, 1987). An examination of developmental psychology provides an example of what is meant by this. During the 20th-century, psychology began to make claims of 'a science of child-rearing, something which could uncover the laws underlying such training, ... (and) ... pinpoint the interventions needed to correct matters when the 'way' went wrong' (Rogers, 1993:160). This claim caused children to be seen as the responsibility of the state rather than their parents (Burman, 1994) and led to a profusion of conflicting theories regarding the development of children. Rogers (1993:160) highlights some of the contradictions that the different psychological models have proposed regarding the development of children:

- biological blue-prints unfolding through maturation;
- almost infinitely flexible receptacles of specific socialisation practices;
- a seething mass of unconscious sexuality and aggression;
- elaborated puppies undergoing house-training;
- a set of inner traits of disposition and ability;
- a mind striving for knowledge - a biological computer (Rogers, 1993:160).

This confusion within the study of child-care or developmental psychology simply illustrates the confusion that exists elsewhere in psychology. Some people interpret this confusion as an illusion that simply reflects a theoretical refinement; others argue that knowledge is socially constructed (Bannister *et al.*, 1996; Rogers, 1993) and that research seems to reflect concerns and issues that are 'informed by dominant social agendas' (Burman, 1987:138). My tendency is to agree with the latter argument, that facts are not waiting to be discovered, but are rather brought into being. Therefore, psychological theories are always open to dispute and re-interpretation. It is impossible to know 'the truth', because the context is always changing.

The therapeutic model that makes sense today may be ridiculed in the future. So, how then does a responsible psychologist work within an ever-changing context.

Critical psychologists suggest a *"process of critique"* (Burman, 1994:1) whereby the *"socially organised frameworks of meaning that define categories and specify domains of what can be said and done"* are laid bare (Burman, 1994:2). Rappaport and Stewart (1987:302) argue that it is *"helpful for self critique to make use of ideas, methods and practices developed in the context of world views different from ones own"*. This will encourage us to become reflective practitioners whereby *"we ask questions about the meaning and functions of our own work"*. They stress an inward as well as an outward focus, as *"using ideas that emerge from elsewhere, certain social values and voices other than our own become salient and welcome as part of the 'conversation'"* (Rappaport *et al.*, 1987:304). They warn against a dogged adherence to our own positions and suggest that we appreciate the ironies, tensions, and contradictions inherent in our own ideas. We need to be explicitly aware of our own value systems and subjectivity. They also stress that *"individuals are part of systems and systems are made up of individuals and that it makes no sense to talk about people out of context, conversely it makes no sense to talk about systems without reference to real people"* (Rappaport *et al.*, 1987:301).

In my view, the current education system adheres to taken-for-granted practices that have become comfortable ways-of-being. The marginalisation of parents and the disempowerment of learners are examples of this. Communication between teachers and parents tends to be one-way, with the teacher-as-expert providing progress reports and instructions to the parents. Similarly, learners have little say in their own academic development. It is no wonder that learners are rebelling against and alienated from processes that they should be central to. It is important, I feel, to take note of Rappaport *et al.* (1987) by critically questioning our own professional practices and the theories that inform them. It is necessary to experience the discomfort of moving from our taken-for-granted ways-of-being and interacting, and exploring other ways-of-being.

2.2.3 Reflective Practitioner

Reflective practitioners critically reflect on their own professional practice and methods, as well as current theories regarding that practice, in an attempt to continually improve their own professional development. Humphreys and Susak (2000:79) highlight the distinction

between *"reflection-on-action"* which involves teachers *"revisiting their teaching and critically reflecting on the nature of their actions"* and *"reflection-in-action"* which refers to *"teachers as being aware of the decisions they are taking and the changes they are making in light of feedback as they work"*. My understanding of this is that the responsibility for choosing to use certain practices falls on the reflective practitioner rather than state authorities. It is the responsibility of reflective practitioners to critically reflect on their own practices and be able to justify them. This type of practice leads to professional empowerment, where practitioners inform the state rather than being dictated to by it.

In addition, Osterman (1990) argues that reflective practice should be extended to include formally writing up such reflections in order to share professional skills and so develop professional knowledge. My impression of this is that the aim is not so much to add to the 'objective' body of knowledge (McNiff, 1993) but rather to stimulate professional discussion regarding current issues. Again, the result is the empowerment of practitioners, as professional development no longer resides solely in the academic 'ivory tower', but also in the field of practice.

If educators accept the gauntlet that has been thrown down and embrace reflective practices, they will empower themselves. Their own empowerment will then place them in a position to empower other marginalised groups within their own profession. It is thus not inconceivable that in the future reflective educators will be responsible for creating an education system in which all stakeholders (parents, learners, and teachers) participate on an equal footing.

2.2.4 Concluding: Myself-As-Psychologist

At this stage in my professional development then, I work from a critical, self-reflective, ecosystemic framework. The ecosystemic framework allows me to work holistically, to be aware of the socio-political context in which my client is situated; and to take cognisance of the multiplicity of interactions that occur. This is supplemented by a critical outlook that views knowledge as being socially constructed and containing hidden power dynamics, and a self-reflexivity that encourages me to consider my own issues and agendas and how they may affect my client relationships.

2.3 MY PHILOSOPHY OF EDUCATION

Inevitably, my theoretical framework as a psychologist informs my theoretical framework as a teacher. My teaching approach and my view of educational processes needs to be congruent with that of my psychological theories. My framework as a psychologist emphasises the location of the learner within a multiplicity of dynamic systems and relationships; and encourages a critical view of educational theory combined with self-reflexivity. Therefore my overarching approach is constructivist (contextual, learner-centred and active construction of knowledge), democratic, inclusive, outcomes-based and whole-school in approach. At the same time, I endeavour to be a reflective practitioner, questioning and reflecting on my own educational practices and current educational theories in a quest for continuing professional development.

2.3.1 Constructivist

Constructivism is a theory of how we learn. Constructivism proposes that learning occurs when we construct, create, invent and develop our own knowledge (Kershner & Pointon, 2000; Somuncuoglu & Yildirim, 1999; Winch, 1998); it is an active, meaning-making process (Ernest, 1998; Kershner *et al.*, 2000; Somuncuoglu *et al.*, 1999; Winch, 1998). Learning in constructivist terms is:

- Both the process and the result of questioning, interpreting, and analysing information
- Using this information and thinking to develop, build, and alter our meaning and understanding of concepts and ideas and
- Integrating current experiences with our past experiences and what we already know about a given subject (Ernest, 1998; Kershner *et al.*, 2000; Somuncuoglu *et al.*, 1999; Winch, 1998).

Therefore, we each construct our own meanings from information that we receive and from our experiences. Thus, as no one has exactly the same experiences, our understanding of information cannot be the same. In this way, learning can also be seen as contextualised, affected by the socio-cultural environment in which we live (and hence based on ecosystemic interactions).

Williams and Burden (1998:190) argue that the facilitation and mediation by teachers takes place through social interactions and can be more aptly termed *"social constructivism"*. They use 'social interactionism' as a framework for cognitive education. This approach is based on Bronfenbrenner's (1979) ecosystemic model, but it *places "equal emphasis upon all features and participants within a system or organisation rather than emphasising the power of the system itself"* (Williams *et al.*, 1998:192). It seems to me though, that this approach concentrates mainly on the school systems, rather than on all the systems to which a learner belongs. For this reason, I prefer to use the ecosystemic approach.

If learning is about learners making their own meaning and actively creating knowledge, then this means that learners need to be empowered with the necessary skills and strategies to enable them to do this (Kershner *et al.*, 2000; Somuncuoglu *et al.*, 1999; Williams *et al.*, 1998; Winch, 1998). The focus in a constructivist classroom is on generating learning through learners actively questioning, investigating, and problem solving rather than on simply transmitting information this (Kershner *et al.*, 2000; Somuncuoglu *et al.*, 1999; Williams *et al.*, 1998; Winch, 1998). Similarly Williams *et al.* (1998:190) point out that learners *"need to develop the necessary cognitive and metacognitive skills in order to make sense of the enormous variety of stimuli with which they are continually bombarded"*. This does not mean that content is negated, but rather used in a different way, where *"students uncover, discover, and reflect on content and their conceptions of such through inquiry, investigation, research, and analysis in the context of a problem, critical question, issue or theme"* (Marlowe, 1998:11). In essence then, constructive learning is learner-centred, active, and contextual.

2.3.2 Facilitation, Mediation and Problem-Solving

The role of the teacher becomes that of facilitator, mediator and problem-solver. In accordance with international research (Bowring-Carr & West-Burnham, 1999; Fawcett, 1999; Male, 1999), Lomofsky, Roberts, and Mvambi (1999:76) stress the fact that *"in the information age the teacher's role has changed from a transmitter of old knowledge to that of a mediator/facilitator who encourages learners to construct their own knowledge and become independent learners"*. The teacher views learners as individuals, each possessing their own inherent gifts and limitations within and without the academic context. The facilitative teacher accepts the challenge of ensuring that each learner's potential within the academic context is maximised. In order to do this the teacher mediates both the content to be

learnt and the school environment, ensuring that the needs of each learner are met. This will involve teachers in a problem-solving role, as they will need to ascertain where the learner's difficulty lies and create a strategy that resolves the problem. Teachers need to adapt and change the way they structure or present learning activities to ensure that these different learning styles and interests are accommodated.

2.3.3 Democratic Education

In South Africa the history of Apartheid clearly demonstrates the dangers of authoritarian and patriarchal systems of management. While we are very aware in this country of the obvious discriminatory practices, namely racism and sexism, we still fail to see other minority groups that are constantly being discriminated against within our school systems. Such minority groups are either prevented from or have limited involvement in the decision-making processes in the school and education systems (learners and parents); or are denied access to the school altogether (cognitively and physically challenged learners). While in the political arena 'democracy' and 'constitutional rights' are the latest catchwords, the philosophy embodied within them has yet to filter into the education system. Our education system still works in a 'top-down' manner, where new policies are envisaged and then imposed through political legislation, rather than being generated and embraced at ground roots level. This authoritarian power structure is mirrored within our schools where decisions are usually made by the school board (or governing body) and the school management team.

Davies (1999) argues that schools reproduce social power dynamics, and if we wish learners to understand democracy and develop democratic skills, we need to develop this experientially within the school system, by creating democratic schools. She refers to a democratic school as involving:

"... a continuous political process whereby the operations of decision-making are transparent and open to challenge; whereby all members participate in the organisation of the school; whereby the rules and laws are consensually drawn up and members agree to abide by those contractual rules, changing them if necessary only through formal mechanisms; and whereby the human rights of all participants are upheld. In particular, the democratic school is one which endorses the particular right, enshrined in the UN Convention on the Rights of the Child, to participate in decisions that effect them" (Davies, 1999:39).

If we truly wish to educate our learners in democracy and to develop a democratic country, we need to start with the learner's experiences of democracy, we need to start where they are,

within the school system (Jennings & Green, 1999). Davies (1999) proposes that teaching for democracy should begin in the school; allowing the learner to develop a 'voice' (and I feel this needs to include parents, junior teachers and non-teaching staff). This would entail *"the ability to articulate one's views and have them heard, and to be aware of transparent and legitimate ways to challenge power, decisions or rules – either individually or collectively"* (Davies, 1999:40).

If we accept that knowledge is actively constructed and contextualised, then in informing our learners of the theory behind democracy without enabling them to experience the workings of it and gain the skills necessary, we are simply paying lip-service to the concept of democracy. Green *et al.* (1999, iii) argues that *"teaching for democracy need not be separated from other academic goals – students can learn to communicate, negotiate, take individual and collective action through academic activities and inquiry"*. This suggests to me that the whole school system, including classroom management, needs to be revisited. Teachers, particularly within the classroom situation, need to be open to (appropriate) challenge, and be able to motivate their choice of content and methodology; or be self-reflective enough to be able to accept justified criticism and make the necessary changes. Classroom/school discipline will focus more on developing self-discipline and peer mediation rather than simply imposing a rule system. Content, school rules and activities will be negotiated and decisions should involve all stakeholders (including parents, learners, and non-teaching staff).

2.3.4 Inclusive Education

Inclusive education, for me, is a natural progression from the first three concepts. If one accepts that learning is constructed and contextual, and that the role of the teacher is to facilitate, mediate and problem-solve; and that the aim of education is democratic, then inclusive education is inevitable. Inclusive education is a system of education that takes into account the different needs of the learners and, by restructuring schools and teaching techniques, enables all learners to be educated in mainstream classes. Previous efforts to integrate individual learners with special needs into the schooling system focused on adapting current tasks and providing support. The curriculum itself was not changed. In contrast to this, inclusive education develops a flexible curriculum that meets the different needs of all learners (Engelbrecht, 1999).

Traditionally, educators believed that learning difficulties were situated within the learner. This is known as the 'individual learner' view or 'deficit approach' (Engelbrecht, 2001; Naicker, 1999). The learner was the focus of the remedial or medical intervention, and was often isolated from his or her peers by placement in special classes or special schools, where the academic expectations were much lower (Engelbrecht, 1999). Learning difficulties are now seen as being caused by several interacting factors, both intrinsic (factors within the learner) and extrinsic (factors outside the learner). Intrinsic factors would include learners with disabilities or learning difficulties. Extrinsic factors would include inadequately trained teachers, under developed schools, poor resources, low income and disrupted families and communities (Engelbrecht, 1999, 2001; Naicker, 1999).

This changing view now emphasises that all learners have special needs, and that they all need learning support in order to achieve their potential. Green (2001:6) points out that *"inclusive education is not simply a question of making special arrangements for some learners with disabilities in a system designed for others. It is about designing education for all in such a way that it becomes 'normal' for differences to be accommodated rather than seen as exceptions"*. The aim of education now is to ensure that the learning environment values individuality and difference, to remove factors that prevent learning and to promote effective learning among all learners (Engelbrecht, 2001). It is recognised that parents can help greatly with the development of their children and should be encouraged to become involved. In addition, every learner is entitled to lead as fulfilled and independent a life as possible.

The move to inclusive education is an international one that is based in the human rights discourse (Dyson & Forlin, 1999; Naicker, 1999). The World Conference on Education for All in 1990 indicated a new emphasis that valued diversity. This conference advocated a commitment to child centred education, greater parental and community participation, recognition of the wide diversity of needs and a developmental, intersectoral and holistic approach to education.

The Salamanca Statement and Framework for Action on Special Needs Action in 1994 focused on furthering the movement towards Education for All. It advocates that schools that are inclusive are:

"... the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all, moreover they provide an effective education for the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system" (Unesco, 1994:ix).

The international move is towards inclusion as it is believed that this will not only benefit the learner with difficulties, but also all learners and society as a whole.

In keeping with international trends, developments in South Africa have also moved towards including learners with special needs into mainstream education. Since 1994 with the new Constitution of South Africa there has been a commitment to improving the education system, and new laws and policies have been passed to do this. According to Engelbrecht (1999; 2001) this change has been influenced by the following documents:

- The Constitution of SA (1996) which stresses, amongst others, equal right to education
- White Paper on Education and Training (1995) which advocates the need for lifelong learning and the principles of equal access, redress and equity
- The South African Schools Act (1996), which in addition to the above, provides legislation for non-discrimination, the right of parents to choose and the right to claim learning support, and
- Report of National Commission on Special Needs in Education and Training (NCSNET, 1997) and the National Committee for Education Support Services (NCESS, 1997) which recommend an ecosystemic approach to special needs education (Engelbrecht, 1999; 2001).

While inclusive education makes inherent sense to me, my experience indicates that many teachers are at a loss when it comes to implementing it. Lomofsky, Roberts and Mvambi (1999) address the practicalities of implementing inclusive education in the South African classroom. They focus on three main areas, namely, the importance of teacher attitudes, the classroom environment, and cognitive education. Concerning cognitive education they suggest that classroom practice focus on developing metacognitive and cognitive skills. This has implications for my own research. As the South African education system has embraced and endorsed inclusive education then it seems that there will be a need to include cognitive education within the curriculum. If this is so, then it is important that we conduct local studies

to explore the variables that influence the outcome of cognitive programmes, and not just rely on international research.

2.3.5 Outcomes Based Education

Currently South African education is undergoing a transformation, with the intention of Curriculum 2005 being to 'simultaneously overturn the legacy of apartheid education and catapult South Africa into the 21st Century' (Department of Education, 2000:1). According to Green (2001:11) Curriculum 2005 is grounded in constructivist theories of learning and knowledge and:

"... regarding the learning process, it draws on a broad philosophy of learner-centred education consistent with Piagetian and Vygotskian notions of the importance of active engagement, but more explicitly located within Freirian tradition of critical pedagogy and People's Education. The conception of effective thinking embodied in the Critical Outcomes prescribed for all levels of education, and specified in Curriculum 2005, is informed by both social constructivism and information processing theories" (Green, 2001:11).

Green (2001) has pointed out that while the critical outcomes for Curriculum 2005 have been detailed, there has been minimal guidance regarding how teachers will achieve these outcomes. In addition, she argues that in a country *"where educators' own experience as both learners and professionals is of an extremely structured and rigid system"* the lack of guidance could be seriously problematic (Green, 2001:11).

How then do schools approach the task of creating a learning environment that meets the requirements of Curriculum 2005? How do we create a nation of active, critical learners when previous education philosophies concentrated on passive, non-critical role-learning? The answer seems to lie in the whole school approach.

2.3.6 Whole school approach

A way in which schools can create a democratic, inclusive, outcomes-based approach is by developing and adopting a:

"... fully collaborative culture ... which draws upon the full range of professional skills and expertise to be found among the members of the organisation. Such management cultures move us away from the individuality that characterised schools of the previous generation, heavily dependent on the headteacher as the leader, towards the high-performing organisation distinguished by teams in which each member is a self-led, growing dynamic individual, prepared to contribute to the greater good of the team and the organisation" (Male, 1999:269).

Swart and Pettipher (2001:33) recommend that in order to meet the requirements of Curriculum 2005, that is to be outcomes based and inclusive, schools need to start using the principles and strategies of whole-school development, namely:

- **Empower citizens in democracy.** The goal of education is to educate all learners to become effective contributing citizens in a democracy
- **Include all.** Access to education needs to be provided where all learners learn together across culture, ethnicity, language, ability, gender and age within the local community
- **Teach and adapt for diversity.** Design instruction to accommodate the diverse needs, interests and abilities of all learners and engage them in active learning through meaningful, real-world activities
- **Build community and support learning.** Establish collaborative networks and community resources to build support for all role-players (learners, parents and educators)
- **Build partnerships.** Build meaningful collaborative partnerships within the school and with families and the community, and
- **Develop and share leadership.** Shared leadership is aimed at mobilising the active contribution and vision-building of every member of the school community (adapted from Swart et al, 2001:33).

Of particular interest within the parameters of my research, is to *"teach and adapt for diversity"* (Swart et al., 2001:33), to *"design instruction to accommodate the diverse needs, interests and abilities of all learners and engage them in active learning through meaningful, real-world activities"*. If this is linked to the outcomes of Curriculum 2005, that is, learners who actively construct meaning and are effective thinkers (Green, 2001) then it seems as if empowering learners to use and be aware of metacognitive strategies is indicated.

2.3.7 Concluding: Myself-As-Educator

My philosophy of education is rooted in constructivism, and embraces the democratic, inclusive, outcomes-based and whole-school approaches. These approaches seem to indicate to me that cognitive education has become a necessary part of the curriculum. I agree with Lomofsky *et al.* (1999:76) who advocate that *"the teaching of cognitive strategies and thinking skills needs to be made explicit and infused into all learning areas"*. This involves moving from a content-based curriculum to one that is *"broad-based and encompasses knowledge, values, attitudes and skills application"* (Lomofsky *et al.*, 1999). This inevitably means that the role of the learner also moves from passive to active, from uncritical to reflective, from disempowered to participatory. My role as an educator is therefore to facilitate this process through mediation, facilitation, and self-reflective practices. An overview of my approach can be found in Figure 2.1.

2.4 ECOSYSTEMIC VARIABLES

In order to teach for diversity and to enable learners to develop the meta-cognitive strategies and cognitive skills that will enable them to achieve their potential, we need to understand where the learner comes from and what factors may be impacting on them that constrains or facilitates their development.

There is seldom a single cause for learning difficulties or problems, although many teachers and parents tend to blame the learner (Pajares, 1996; Wallace Adams, 1996; Westwood, 1993). Westwood (1993) has pointed out that an analysis of learning problems or difficulties needs to examine both external (environment) and internal (psychological and physical) factors of the student. He stresses that an ecological perspective recognises that a learning problem is almost always due to a complex combination of interactive factors. Thus, one needs to look within the learner, family background or culture, peer group, curriculum, teaching approach, learner-teacher relationship and the school/classroom environment for the sources (Westwood, 1993:6).

Similarly, Donald, Dawes and Louw (1999) have stressed examining the wider environmental issues. They cite war, political violence, chronic poverty, disrupted relationships with caregivers and unstable proximal relationships as some of the factors that disrupt the lives of South African children. Furthermore, they point out that chronic poverty

is usually linked with exposure to alcohol abuse, domestic violence and other adverse conditions. They conclude that children growing up in unstable environments, are not as likely to develop the self-regulatory behaviour necessary for successful schooling as those children raised in stable environments (Donald *et al.*, 1999).

Thus, instead of concentrating only on the learner 'deficits', an ecosystemic analysis would examine all the systems to which a learner belongs (school, peer, family, socio-political), as well as the systems within the learner (physical, emotional, psychological). In addition, an ecosystemic approach would also take cognisance of the learner's strengths as well as deficits. The following sections explore the variables that are seen to effect the development of learners. This has been set out in an ecosystemic framework that contains sociological, economic and political variables; school system variables; family system variables; peer system variables and individual variables.

2.4.1 Sociological, Economic and Political Variables

This section elaborates on the social, economic and political variables that are reconstructing our understanding of knowledge. The South African context is also explored.

2.4.1.1 *Changing knowledge*

The generation of knowledge in current times has reached exponential proportions, but the education systems of the world do not seem to have made the necessary adaptations to meet these changes (Haywood, 1997). Bowring-Carr and West-Burnham point out that "*change is now rapid, and non-linear and alters the basics in our lives so that we are having to adjust continuously to new approaches, new jobs, and new expectations*" (Bowring-Carr *et al.*, 1999:4). They expand on this, arguing that "*our children will be doing jobs for which we do not at present have names; they will be using technologies that have not yet been invented*" (Bowring-Carr *et al.*, 1999:4). Similarly, the changing nature of knowledge is a main concern of OECD countries, particularly the maintenance of high levels of education while ensuring that the "*changing and more complex social and economic demands*" are met (OECD, 1998:206).

Research indicates a strong movement in education toward establishing a culture of lifelong learning in order to meet the current social and economic demands (Bowring-Carr *et al.*, 1999; Fawcett, 1999; Male, 1999). Fawcett (1999:189) points out the difficulties of schooling

within the computer age and questions the importance of *"what we teach in today's overcrowded, subject-specific, academia-protected curriculum"*. The teachers' claims to being the font of all knowledge are no longer plausible.

Male (1999:269) sums up recent arguments that there should be a differentiated approach to learning that is:

"... learner specific, and one that takes account of preferred learning styles and intelligences other than those measured purely on the academic/cognitive spectrum ... The demand to help students learn how to learn should foster and produce students who are intrinsically motivated and independent learners. And the need to provide students with information retrieval skills, as opposed to prescribed quantities of 'approved' knowledge, should, in turn, lead to the development of learners who know how to access knowledge as and when it is relevant, a vital skill for members of a workforce in the 'information age'".

Thus, the teaching of metacognitive strategies to enable self-regulated learning and the thinking skills necessary to meet the demands of the 'information age' is mandated. Other changes in education support the idea of differentiated learning and the teaching of metacognitive strategies.

2.4.1.2 The South African Context

The South African youth are living through the educational, economic and social legacy of Apartheid. Education is often characterised by overcrowded classrooms, low academic achievement, lack of sufficient facilities, shortages of textbooks, under qualified teachers and a high drop out rate (Engelbrecht, 2001; Monteith, 1996). This is exacerbated by appalling social conditions, which include "violence, abuse, undernourishment, HIV/Aids, ineffective development transitions and commercial exploitation" (Engelbrecht, 2001:19). The violence alone in South Africa, *"has seriously undermined the quality of life of our most valuable asset - our children ... family life has disintegrated and the learning culture and social norms in schools have broken down"* (Van der Merwe, 1996). In the face of this, Monteith (1996) has pointed out that although the Apartheid system and the education system can be blamed for the 'deficits' (sic) in many of our learners, the individual is ultimately responsible for his or her own development. Indeed, considering South Africa's current economic status this is almost inevitable. He argues that *"the goal of education should therefore be to empower pupils to take responsibility for their own learning to enable them to realise their full potential and to participate fully in society"* (1996:207).

It seems that the changing nature of knowledge combined with the environmental difficulties in South Africa, necessitate a move towards cognitive education; thus empowering learners to regulate their own learning.

2.4.2 School System Variables

Several authors have stressed the role of the school environment in developing the learner's academic self-concept (Jones, 1992; Schunk, 1987, 1992; Wallace Adams, 1996). Factors that need to be considered are the curriculum, teaching approach, learner-teacher relationship and the school/classroom environment. Quite often the school curriculum is Eurocentric, which often alienates learners as it has little validity or relevance to learners of different ethnic backgrounds (Wallace Adams, 1996). Furthermore, in South Africa teaching is often conducted in a second-language medium of instruction, which not only alienates students, but compounds learning difficulties and feelings of inadequacy.

Wallace Adams (1996:315) emphasises the importance of the cultural and familial background of the student. She argues that learners develop feelings of powerlessness *"when they are alienated from their own language and culture, when they do not fully develop their native language and when parents can no longer communicate effectively with their children because the latter speak a different language"*. Furthermore the goals and values of the schooling system are usually those of the dominant cultural group in the society, and these may not necessarily reflect the goals and values of the learners' cultural background (Day, Borowski, Dietmeyer, Howsepian & Saenz; 1992). When the home culture of the learner is seen as inferior to the school culture, the learner is likely to develop a poor self-concept, which will further hamper academic achievement.

The teaching approach can be very authoritarian and rigid, often overly concerned with issues of discipline and control, and with the main emphasis being academic success or failure. Wallace Adams (1996:314) points out that this does not lead to the *"growth of self esteem, feelings of adequacy and personal worth"* and thus consistent motivation and effort are difficult for learners to sustain.

The teaching environment, in South Africa particularly, is often of a very low quality, with a shortage of fully trained teachers and a lack of adequate facilities. This leads to overcrowded classrooms and the inability of teachers to successfully mediate academic content for struggling students.

Teacher expectations of the abilities of learners are of great importance in influencing the learner's academic self-concept (Burns, 1982; Wigfield & Harold, 1992). Teacher expectations are often internalised by learners, and can cause learners to re-evaluate their own academic self-concept either negatively or positively (Burns, 1982). It must be noted here, that the teacher is only one of the influences on learners, and the learners' other experiences and beliefs can mediate teacher influence (Wigfield & Harold, 1992).

2.4.3 Family System Variables

Family interactions and dynamics can also affect the student's academic achievement (Day *et al.*, 1992). The parents' behaviour (praise or criticism), parents' aspirations and expectations, and family goals will determine the students feelings of self-worth and ability (Harter, 1993). When parents provide positive reinforcement and praise, and have realistic expectations, the student is likely to develop a good self-concept and perceived self-efficacy. If there are also role models within the familial household or community that the student can aspire to, then self-expectations and self-concepts of ability can be raised.

2.4.4 Peer System Variables

Learners who do not achieve academic success need to find other ways of bolstering low self-esteem, one way of doing this is by becoming part of a non-academic peer group. Spencer *et al.* (1993:25) have argued that *"low self-esteem people might also recover from a threatened sense of self integrity by engaging in downwards social comparisons"*. By comparing themselves to, and associating with people who are less successful, or do not hold academic achievement to be of value, the student is able to improve self-esteem and to recover the threatened sense of self integrity.

2.4.5 Individual Factors

Learners' individual differences in ability (physical and intellectual) and personality (likes and dislikes) will affect their academic self-concept (Day *et al.*, 1992; Wallace Adams, 1996; Weiten, 1992). If, for example, a learner likes to be physically active and does not enjoy sitting still long periods of time, he or she will find the academic environment more difficult to cope with. This in turn will affect the learner's ability to achieve academically (lack of concentration) which will then impact negatively on the learner's academic self-concept. The extent to which the learner feels that he or she needs to achieve in this area, as well as his or

her fear of failure will also affect the achievement behaviour and subsequently the academic self-concept (Weiten, 1992).

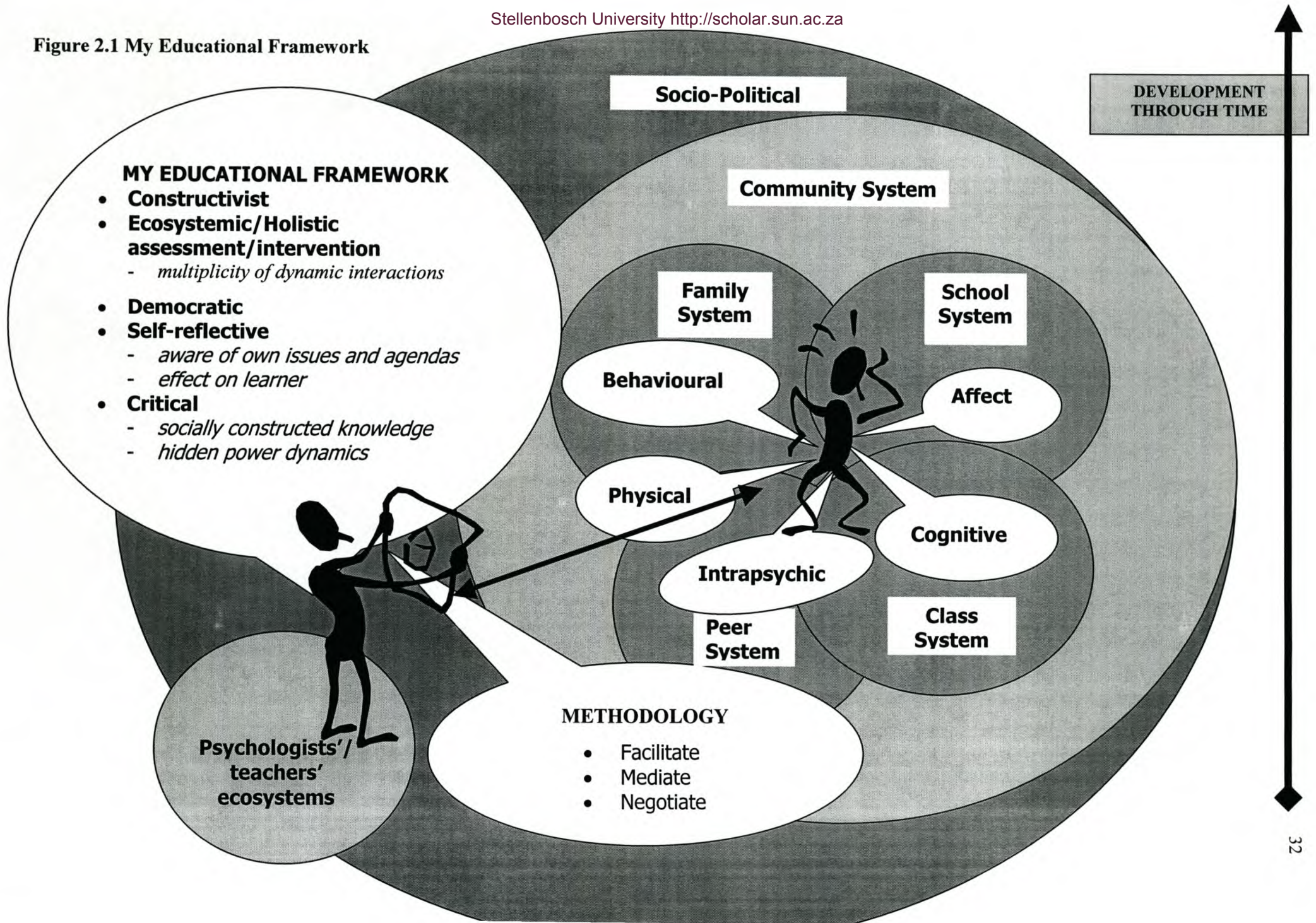
2.5 INTERVENTION STRATEGIES

There are many variables within the different systems to which the learner belongs that affect the learner's academic achievement. It seems likely to me that a single intervention that targets one variable will not be as effective as a more holistic, multi-pronged approach. In addition, it seems likely that interventions that aim at empowering all stake-holders with the necessary skills will be more useful in the long term than continually relying on expert input. The next sections explore ecosystemic and cognitive intervention.

2.5.1 Ecosystemic Intervention

Engelbrecht (2001:21) points out that that interventions which focus on individual learners is unrealistic and advocates an ecosystemic approach to intervention. Other researchers (Donald *et al.*, 1999; Westwood, 1993) have also indicated that intervention programmes need to take the whole environment of the learner into account in order to be most effective.

Figure 2.1 My Educational Framework



Haywood (1997:7) proposes that *"multi-faceted problems require multifaceted"*, not just a *"new approach to a single dimension"*. He feels that the following elements that need to be in place before there will be any significant change in education:

- A clear body of philosophy of education
- Educational goals that follow logically from that philosophy
- Educational methods that are consistent with the goals and the philosophy, and
- A total approach that encompasses the whole educational enterprise, from preschool to university, across educational services including psycho-educational assessment, classroom teaching, guidance, curriculum, parent participation, administration, and education of teachers (Haywood, 1997:7).

I found Haywood's proposal very satisfying as it confirmed my 'personal' knowledge and understanding of how to tackle the current education crisis. In particular I appreciated his emphasis on parent participation. Much of the research that I have read focused on the education, school, and learner systems, but marginalised the role of the parent. In addition, I feel that Haywood clearly articulates the intervention style that I was struggling to lay bare. His article pulls together the threads of my 'personal' knowledge and provides me with a clearer path to follow. Haywood (1997:11) recommends a *"system-wide commitment to cognitive approaches in education"*, which includes:

"... a consistent philosophy of education, explicitly stated cognitive goals, a cognitive-mediational style of classroom teaching, adoption of specific metacognitive curricula extending from early childhood to university, a cognitive-dynamic approach to psycho-educational assessment, administrative changes in support of a broad cognitive approach, cognitive approaches in parent participation, and cognitively oriented clinical work such as speech and language therapy and psychotherapy" (Haywood, 1997:11).

Thus, it seems that there is a great deal of consensus amongst researchers advocating a move towards an ecosystemic, cognitive intervention.

2.5.2 Meta-Cognitive Strategies and Cognitive Skills

Many researchers advocate the teaching of skills and strategies that go beyond the bounds of subject knowledge (Ashman & Conway, 1993; Brigman, Lane, Lane, Switzer & Lawrence, 1999; Burden & Nichols, 1997; De Bono, 1991; Male, 1999). In their survey of literature Somuncuoglo *et al.* (1999) indicate that most definitions of learning strategies separate the strategies into two broad fields: cognitive and metacognitive.

2.5.2.1 Meta-cognitive Strategies

Meta-cognitive strategies refers to ways in which learners think about, plan, monitor and regulate their learning process (Pintrich; 1988; Somuncuoglo *et al.*, 1999). Meta-cognitive learning strategies can also be referred to as 'self-regulated learning', that is the way in which learners manage their own learning and decide which skills or techniques they will use in order to process and use information, or generate ideas. Meta-cognitive strategies enable learners to consciously choose and use specific cognitive skills that they have been taught. Recent research suggests that the use of meta-cognition, or self-regulated learning, may depend on learners' perceptions of personal competence in using cognitive skills (Butler, 1998; Monteith, 1996; Pintrich & Garcia, 1994; Zimmerman & Martinez-Pons, 1992).

Research conducted by Pintrich and Garcia (1994:121) has indicated that the learners who used deep processing strategies (such as elaboration and organisation) and who "*control their cognition and behaviour through the use of planning, monitoring and regulating strategies*" perform better academically. They believe that a theoretically based model of learners as active and constructive, which focuses on cognitive and metacognitive strategies rather than general learning or personality styles, is more effective. The emphasis then falls on directly teaching learners strategies that help them to control the studying process. There has been much research in this area that substantiates these findings (Albaili, 1997; Brigman *et al.*, 1999; Burden, 1997; Butler, 1998; Haynes, 1990; Hidi *et al.*, 2000; Monteith, 1996; Nolen *et al.*, 1990; Tuckman, 1996).

The teaching of learning strategies seems to focus on the following two areas:

- developing cognitive and metacognitive strategies (summarising and processing, memory, and thinking techniques) (Monteith 1996; Pintrich, 1999; Pintrich & Garcia, 1994); and

- enabling students to manage their affective and motivational processes during learning (Butler, 1998; Monteith 1996; Pintrich, 1999).

The aim is to enable learners to accept responsibility for their own learning, to help them to develop self-regulated learning patterns and to help them to establish realistic academic goals (Brigman *et al.*, 1999; Haynes, 1990; Hidi & Harackiewicz, 2000; Jones, 1992; Kehr, Bles & von Rosentiel, 1999; Malan, 1996; Schunk, 1987, 1992; Van der Merwe, 1996; Zimmerman, *et al.*, 1992). By implementing specific intervention strategies, teachers empower learners to become independent learners and so reach their full potential (Brigman *et al.*, 1999; Albaili, 1997; Bobbitt Nolen *et al.*, 1990; Butler, 1998; Haynes, 1990; Kehr *et al.*, 1999; Monteith, 1996; Morgan, 1985; Tuckman, 1996). An important factor that needs to be kept in mind when teaching learning strategies is that learners can have difficulty transferring techniques from one environment (or subject) to another (Kehr *et al.*, 1999; Pintrich *et al.*, 1994; Van der Merwe, 1996; Zimmerman *et al.*, 1992).

2.5.2.2 Cognitive Strategies

Cognitive strategies mainly consist of rehearsal, elaboration and organisation which help learners to encode, organise and retrieve new information (Somuncuoglo *et al.*, 1999). Furthermore, cognitive strategies are divided into surface cognitive strategies such as rehearsal, which encodes information in the short term memory, and deep cognitive strategies such as elaboration and organisation which enable long term retention of information (Nolen *et al.*, 1990; Somuncuoglo *et al.*, 1999; Pintrich *et al.*, 1991).

Weinstein, Ridley, Dahl and Weber (1989) argued that the teaching of learning strategies needs to avoid mechanical application by ensuring that learners have a variety of learning strategies that they can implement and that they need in which contexts they must implement the different strategies. The new approach to the teaching of learning strategies is holistic in that it teaches "the 'why's' of learning as well as the 'how's'" (Somuncuoglo *et al.*, 1999:268). Monteith (1996) argues that learning strategies are goal directed, consciously implemented, requiring of effort and specific to the situation. He points out that the aim of a learning strategy can be affective (changing motivational or emotional state) or cognitive (assessing the best way in which to select, acquire, organise, or integrate new information).

2.5.2.3 Components of Study and Thinking Skills Programmes

When designing this study and thinking skills programme, I referred to the research in metacognitive and cognitive strategies and then, using my personal experience, I tailored a programme that I felt would best suit the needs of the learners and take account of the time constraints. As was mentioned in the previous section, summarising, processing, memory and thinking skills are considered to be important strategies for learners to master. Motivational and affective management is also indicated. As I was only at the school for six months, and as their guidance teacher would be focusing on motivational and affective strategies in the second semester, I decided to concentrate on summarising, processing, memory and thinking skills. I chose to use Muscle Reading (Ellis, 1997) and Column Method notes for processing and summarising skills, a variety of visualisation techniques for memory skills and a small selection of De Bono's (1994) thinking skills (CAF, FIP, AGO, PNI, C&S, OPV). I used these particular forms of the skills as I was comfortable with them after 4 years of teaching study and thinking skills, and I was fairly confident that the learners could master them. A copy of the course is provided in Appendix A.

2.5.2.4 Facilitative Teaching Methods

Teaching methods are central to improving the academic skills of learners. The roles of the teacher in developing a positive student-teacher relationship and in developing a good classroom climate are closely linked. The teacher can facilitate the positive development of a student's academic self-concept by providing affirmation, positive reinforcement for adaptive behaviours and having positive but realistic expectations of the student (Burden, 1997; Jones, 1992; Haywood, 1997; Pithers & Soden, 2000). Teachers also need to set a good emotional climate in the classroom, which facilitates social interaction *"based on trust, respect, and integrity"* (Jones, 1992:102). The teacher needs to avoid using negative, critical and directive statements, and replace them with positive and constructive statements, in order to decrease the level of tension and hostility.

It is also important that teachers help the learner to prepare emotionally for learning (Malan, 1996). Learners who have a low academic self-concept find it difficult to accept feedback in a positive way, and often contribute academic failure to a lack of ability, despite assurances that the failure may be a result of a lack of skill rather than limited academic potential. Such

learners need to be taught to attribute failure to the correct causes (which will differ for each individual), rather than labelling themselves as incapable (Monteith, 1996; Rogers, 1987).

It has been suggested that teachers need to mediate the academic content of lessons, in order to make it more accessible and relevant to learners of different abilities and backgrounds (Bowring-Carr *et al.*, 1999; Fawcett, 1999; Haywood, 1997; Lomofsky *et al.*, 1999; Male, 1999; Pithers *et al.*, 2000; Schunk, 1987; Wallace Adams, 1996; Jones, 1992). This needs to be a flexible teaching style that can be used across the curriculum and does not need to be restricted to the cognitive skills classroom (Haywood, 1997). The process of mediation was outlined in more detail in section 2.3.2.

The majority of schools in South Africa provide insufficient opportunities for students to achieve academic success. Along with teaching students effective learning strategies, it is important to ensure that the teachers allow the learners to achieve success when implementing the strategies. This will enable students to replace low academic self-concepts with higher ones (Hamachek, 1995).

It seems that it is not only what is taught that is important, but also how it is taught. If teachers wish to encourage learners to take the necessary risk-taking behaviour, and if they wish to enhance the self-esteem of learners, they need to ensure that the classroom environment is conducive to these goals.

2.5.3 Implementing Cognitive Strategy Programmes

There are three approaches to the way in which cognitive strategies are taught, that is, integrated with core subjects (Burden 1997; de la Garanderie, 1991), as a separate, independent subject (Burden, 1997; De Bono, 1991), and using a combination of independent and integrated approaches (Burden, 1997). The latter approach has been used successfully in South Africa (Mouton, Odendaal, Botha, Claassen, Strasheim & Vorster, 1990). In this study the thinking skills were taught in isolation but were also integrated into other subjects, thus enabling the transference of skills. One of the problems with teaching thinking and study skills in isolation is that it *"leads to inert knowledge if it is not set in a context to which it can be applied"* (OECD, 1991:223).

Haywood (1997), who has participated in the evaluation of many promising and innovative cognitive programmes (including Feuerstein's programmes, Instrumental Enrichment and

Dynamic Assessment, Bright Start, Cognitive Curriculum for Young Children, De Bono's CoRT, Weikarts High/Scope programme), states that many of these programmes have had "limited success" (Haywood, 1997:8). The successful programmes had been:

- adopted at the philosophical level by the administrators
- implemented by well trained teachers
- implemented in a large number of classes in a school system rather than in isolation
- implemented as part of a system-wide commitment to cognitive approaches at all levels
- given constant nurturing and support
- evaluated realistically (Haywood, 1997:8).

Pithers *et al.* (2000:246) state that the latest research indicates that *"learning to think well needs to be acknowledged explicitly as an aim and appropriate changes made to courses"*. They go on to suggest that *"at all educational levels ... staff development initiatives may need to focus more on teachers' conceptions of learning and teaching if they are to deploy the teaching approaches suggested in a generative way"* (Pithers *et al.*, 2000:246). Similarly, Haywood (1997) stresses that the style of teaching that is most successful is the mediation teaching style. He also argues for a whole school approach to the teaching of cognitive strategies, where the school leadership embraces a philosophy of education that has the following elements:

- universal education is an admirable and achievable goal
- at the individual level, the first goal of education is to stretch the mind, that is to enhance people's ability to educate themselves
- a major goal of education is to increase, rather than to limit, peoples' options; in other words, to enhance their 'freedom of movement' across intellectual, occupational, and social boundaries
- another goal of education is to help people to apply their thinking processes systematically and effectively to the learning of particular bodies of knowledge

- a major goal should be to help people to develop processes of logical thought that can be applied to the solution of personal, social and moral problems and dilemmas. This goal suggests not that people should be taught what to think, but that their minds should be liberated by helping them to learn how to think more effectively and systematically
- within such a philosophical system, cognitive goals should become legitimate, and explicitly stated; for example, they should become part of individualised education plans (Haywood, 1997:9).

This argument seems to be born out by a number of research studies (West-Burnham *et al.*, 1999) carried out in England, using the whole-school approach. These studies focused on creating a learning culture that permeated the whole school and secured professional commitment (West-Burnham *et al.*, 1999).

2.6 FROM DISCUSSION TO IMPLEMENTATION

The implementation of a study and thinking skills programme, in a nutshell, entails a paradigm shift. This necessitates an ecosystemic approach that requires a fundamental philosophical commitment by the whole school to cognitive education, and involves teachers mediating and facilitating; and learners participating. This is a daunting task that requires much girding of the loins and marshalling of resources. The South African education system is not the easiest to revolutionise as will be seen in the following chapters.

CHAPTER 3

METHODOLOGY

Look for the answers within your own mind.
Drink of the cup of your joy and your sorrow.
Welcome, my friend, to the land of tomorrow.
Seek, and be open to what you might find.
You, more than I, are aware of your living –
Yours for the asking, yours for the giving.

See how you stand on the edge of decision,
See how you act, and consider, and plan;
See how your practice is honed to precision,
See how you weigh what you can't and you can
You, more than I, may judge your own ability,
How to turn chaos to easy stability.

You have the questions to some of my answers,
I have the questions to some of your own.
Consciously tuned dialectical dancers,
We are the knowers of that which is known.
Yours is the key to your own education.
Open your mind to the power of creation.

(McNiff, 1993:113)

3.1 A PHILOSOPHICAL RATIONALE

When I first started this research thesis I was very interested in implementing Action Research as my reading had indicated that this method is very appropriate for the education setting, particularly when the intention is to change behaviour patterns. In addition to this, current writing in the cognitive field argues that *"traditional pre-post experimental designs are not the most appropriate means of evaluating the impact of curriculum interventions like cognitive skills programs"* (Burden *et al.*, 1997:33). Instead it is argued that the specific context in which programmes are implemented and the process of turning *"intentions into actions"* (Burden *et al.*, 1997:34) need to be taken into account.

My intention was to use an Emancipatory Action research model with the intention of empowering the participants. However, the research did not go as intended and I found that certain interventions did not materialise and others did not go according to plan. These

circumstances resulted in me feeling quite depressed regarding the research process, as my research certainly did not seem to meet the ideal criteria laid down by the action research 'experts'. However, after extending my reading I found that things were not quite so bad as I had thought. One of the main issues that I discovered was that here I was, intending to emancipate the learners and parents and teachers, yet reflection into my own actions and practices highlighted that I myself was not free to be me. How then could I expect to liberate others when I had not worked through this myself? Thus, the research started to focus on myself as practitioner, and how I could change, and through those changes work ecosystemically to empower others. This chapter aims at describing and delineating my research journey, and the philosophical rationale that underpins it.

3.1.1 Qualitative and Emancipatory

At the outset of my research planning, I decided to use qualitative methods as I wished to explore the subjective feelings and opinions of the participants regarding the proposed intervention.

Many researchers have argued that there can be no clear separation between theory and method in qualitative approaches (Bannister *et al.*, 1996; Henwood & Pidgeon, 1994; Parker 1996). In essence, what they are arguing is that the researchers' epistemological views inevitably inform their choice of methodology. What is implicit in this argument is that different epistemologies and methodologies will also lead to the discovery of different data or 'facts' about the researched area. While it is important to understand how an epistemological view will be reflected in the choice of methodology; what is more important to me, is to understand that my worldview would inevitably define the areas I investigate, the way in which I investigate them and most crucially, the 'truths' or 'meanings' that I derive from my research. Thus, it is necessary for me at the outset to outline and justify my approach to this research.

Qualitative approaches to psychological research are fairly recent, and have in essence arisen as a counterbalance to the quantitative approach to research, although it is *"not necessary to set quantitative and qualitative traditions in diametric opposition to one another"* (Parker, 1996:1; Henwood *et al.*, 1994). Qualitative research rose from a *"phenomenological paradigm which holds that reality is socially constructed through individual or collective definitions of the situation"* (Firestone, 1987:16; Henwood *et al.*, 1994). It is interested in

understanding the "*social phenomenon from the actors' perspective through participation in the life of those actors*" (Firestone, 1987:16; Griffith *et al.*; 1994). Therefore, qualitative research focuses on using interpretative techniques in order to understand the subjective meaning of the situations.

Mertens (1998) outlines three research paradigms, namely Positivism/Postpositivism, Interpretive/Constructivist and Emancipatory. The Emancipatory paradigm allows for the use of both qualitative and quantitative methods where relevant, and encourages informed practitioners to form partnerships with researchers to plan and conduct research and evaluation studies in a meaningful way (Bannister *et al.*, 1996). Mertens (1998:18) identifies four common factors within the emancipatory paradigm that separate it from the interpretive/constructivist paradigm; these are:

- It places central importance on the lives and experiences of the diverse groups that have traditionally been marginalised ...Researchers must focus on how oppressed group's lives are constrained by the actions of oppressors, individually and collectively, and on the strategies that oppressed groups use to resist, challenge, and subvert
- It analyses how and why inequities based on gender, race or ethnicity, and disability are reflected in the asymmetric power relationships
- It examines how results of social inquiry on inequities are linked to political and social action
- It uses emancipatory theory to develop the program theory and the research approach (adapted from Mertens, 1998:18).

I was inspired by the emancipatory paradigm, in particular its relevance to the education system in South Africa, which is historically authoritarian, paternalistic and disempowering to the majority of role players (staff, learners and parents). I decided to use my re-entry into the school system to investigate various areas of concern that I had regarding the education/schooling system. Areas of particular interest to me in the early formulation stages were, firstly, exploring oppressed groups such as learners, parents *and* teachers that are marginalised and disempowered by the education and school systems. Secondly, exploring the inequities of the teacher-learner, teacher-parent and learner-parent relationships and relating this knowledge to social and political practices. Thirdly, to reflect on the effect of

Emancipatory research on the development and personal growth of the researcher (that is myself). And finally, to assess how these factors impacted on my own teaching.

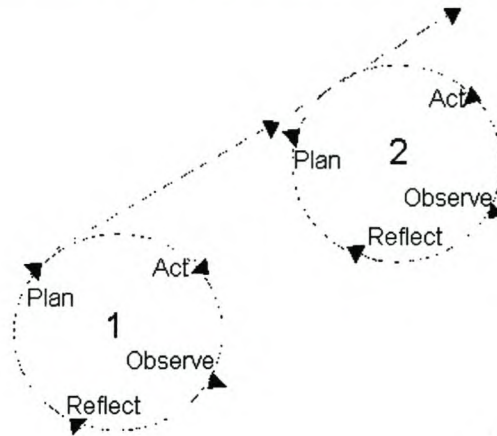
Having decided on some areas of investigation, I needed a methodology that would fit within the emancipatory paradigm and yet, at the same time, meet the unique demands of the teaching environment. The action research methodology seemed particularly well suited to my needs.

3.1.2 Action Research

What particularly interests me in action research methodology is that the research question arises out of the problems of the practitioners and it is an important aspect of this approach that the research takes place within the researched environment and not in isolation. The immediate aim of the research is to understand these problems and the researcher (who may be the practitioner) formulates speculative and tentative general principles about the problems that have been identified (Bannister *et al.*, 1996). This enables the researcher to hypothesise about what intervention is likely to lead to improvements. The new intervention then takes place, is in turn assessed and generates new actions. Therefore, action and evaluation proceed separately but simultaneously (Hart, 2001).

Action research is thus a good methodology to use when implementing interventions aimed at changing peoples' behaviour (Bannister *et al.*, 1996). Thus, as will be delineated later, my research began as a wide exploration, and with action, reflection and evaluation was narrowed down, with interventions and exploration becoming more specifically targeted. The basic action research spiral works as follows (see Figure 3.1 for diagrammatic representation):

- Select the general area. Discuss, observe, read and decide on your first action.
- Take your action and monitor your action
- Examine the information you have collected
- Reflect on (a) processes, (b) outcomes
- Plan next action
- Take next action
- Continue (Bannister, *et al.*, 1996).

Figure 3.1: Diagram illustrating the Action Research spiral

(Hatten, Knapp & Salonga, 1997:2)

McTaggart (1993;31) argues that in addition to this cyclical process, action research is (see Table 3.1. for an outline of this viewpoint):

"... a dynamic process in which these four aspects are not understood as static steps, complete in themselves, but rather as moments in the action research spiral of planning, acting, observing and reflecting. In the process, the aim is to bring together, through mutual attraction, discourse and practice (in the one dimension) and construction and reconstruction (in the other), so improvements in practice and in understanding can be made systematically, responsively, and reflectively".

This viewpoint is outlined in Table 3.1 below.

Table 3.1: The 'moments' of action research

	Reconstructive	Constructive
Discourse (among participants)	Reflect Retrospective on observation (reconnaissance and evaluation)	Plan Prospective to action (constructed action)
Practice (in the social context)	Observe Prospective for reflection (documentation)	Act Retrospective guidance from planning (deliberate and controlled strategic action)

(Mc Taggart, 1993:32)

3.1.3 Characteristics of Action Research

Action research can be differentiated from other types of research by a number of characteristics. Winter (1996) refers to six principles (or characteristics) that inform the action research process:

- ***'Reflexive critique*** – which is the process of becoming aware of our own perceptual biases
- ***Dialectic critique*** – which is a way of understanding the relationships between the elements that make up various phenomena in our context
- ***Collaboration*** – which is intended to mean that everyone's view is taken as a contribution to understanding the situation
- ***Risking disturbance*** – which is an understanding of our own taken-for-granted beliefs and willingness to submit them to critique
- ***Creating plural structures*** – which involves developing various accounts and critiques, rather than a single authoritative interpretation
- ***Theory and practice internalised*** – which is seeing theory and practice as two interdependent yet complementary phases of the change process. (Winter, 1996:13-14).

In addition to these six characteristics, Hatten *et al.* (1997) in their overview of action research, identified another four characteristics. The first three characteristics that they raise expand on the concept of 'theory and practice internalised' discussed by Winter (1996).

- ***Problem solving*** – the main aim of action research is to solve practical problems that are experienced within a specific situation
- ***Change in practice*** – action research should enable practical improvements to take place in the identified problem areas
- ***Theory development*** - action research should further inform theoretical development
- ***Public results*** – the ultimate purpose of action research is to make available the theories and solutions which are produced to the public, other participants and also to the wider

community who may have an interest in that work setting or situation (Hatten *et al.*, 1997:2).

These points raised by Hatten (1997) are congruent with my psychological framework and educational philosophy as outlined in Chapter 2. So at this stage I was comfortable with action research as a methodology, but needed to decide on which type of action research I was going to use.

3.1.4 Types Of Action Research

My reading revealed that action research can be divided into three main types, namely, technical, practical and emancipatory (Hatten *et al.*, 1997; McTaggart, 1993; Zuber-Skerrit, 1996). Table 3.2 summarises the differences between the three types.

Technical action research aims at ascertaining the effectiveness of an educational practice or intervention within a practical situation (Hatten *et al.*, 1997; McTaggart, 1993; Zuber-Skerrit, 1996). The researcher remains the 'expert' and the practitioner is co-opted and dependent on the researcher situation (Hatten *et al.*, 1997; McTaggart, 1993; Zuber-Skerrit, 1996).

Practical action research involves the establishment of co-operative relationships in order to identify problems and possible solutions. The researcher facilitates the practitioners' articulation of their values and concerns through self-reflection; and the planning, monitoring and evaluation of action (Hatten *et al.*, 1997; McTaggart, 1993; Zuber-Skerrit, 1996).

Emancipatory action research "*aims not only at technical and practical improvement and the participants' better understanding, along with transformation and change within the system itself or those conditions which impede desired improvement in the system /organisation'*" (Zuber-Skerrit, 1996:5). There is no hierarchy between the researcher and practitioner, rather they work collaboratively on an equal footing (Hatten *et al.*, 1997; McTaggart, 1993; Zuber-Skerrit, 1996).

The question for me at this stage was that though this fitted with my own worldview, how appropriate was action research when working in an educational setting? Zuber-Skerritt argues that "*emancipatory action research is an appropriate methodology for education development ... as well as for the professional development of managers and teachers as action researchers*" (1996:85).

Table 3.2: Types of action research and their main characteristics

Type of action research	Aims	Facilitator's role	Relationship between facilitator and participants
1. Technical	Effectiveness/efficiency of educational practice Professional development	Outside 'expert'	Co-option (of practitioners who depend on the facilitator)
2. Practical	As (1) above Practitioners' understanding Transformation of their own consciousness	Socratic role, encouraging participation and self-reflection	Co-operation (process consultancy)
3. Emancipatory	As (2) above Participants' emancipation from the dictates of tradition, self-deception, coercion Their critique of bureaucratic systematisation Transformation of the organisation and the educational system	Process moderator (responsibility shared equally by participants)	Collaboration

(Zuber-Skerrit, 1996:4)

Zuber-Skerrit summarises the characteristics of emancipatory action research as practised by practitioners, in the CRASP model which she developed in 1992 (see Figure 3.2). She states that action research is:

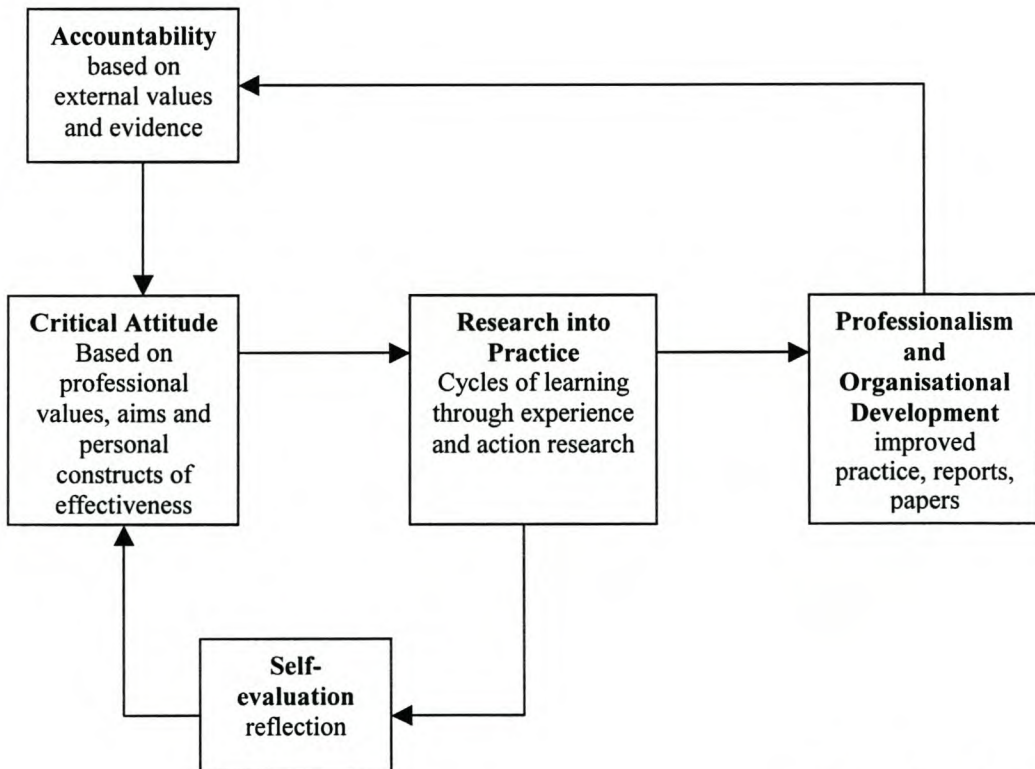
Critical collaborative enquiry by
 Reflective practitioners being
 Accountable and making the results of their enquiry public,
 Self-evaluating their practice and engaged in
 Participative problem-solving and continuing professional
 development (Zuber-Skerrit, 1996:85).

I found her model to be of great use especially as I, a reflective practitioner combining myself-as-researcher and myself-as-teacher, am involved in continued professional development through participative problem-solving. Through her model, she argues that professionalism in *"higher education can be achieved through collaborative, critical research into practices through cycles of continuous learning through experience and action research. Important requirements for action research are self-evaluation and reflection*

based on evaluation and invited critical feedback from stakeholders" (Zuber-Skerrit, 1996:86).

As previously explained, what was of particular importance to me was that the relationship between the researcher (myself) and the participants should be empowering to those who were disempowered (pupils, parents, other teachers). In other words, the research needed to be a dialectic process whereby participant communication would be encouraged and according to this, changes would be made to the intervention (Bannister, *et al.*, 1996). Thus, it became this researcher's intention to work from an Emancipatory paradigm in which the research would be seen as a dialectic process, whereby feedback is received and changes made in accordance with suggestions made by the participants. Emancipatory Action Research, particularly as summarised by Zuber-Skerrit (1996:86) was selected as the methodology.

Figure 3.2: CRASP model of action research for management and organisation development



(Zuber-Skerrit, 1996:86)

3.1.5 Practitioner Action Research

"If you want to know a certain thing or a certain class of things directly, you must personally participate in the practical struggle to change reality, to change that thing, or class of things, for only thus can you come into contact with them as phenomena; only through personal participation in the practical struggle to change reality can you uncover the essence of that thing or class of things and comprehend them".

(Mao Zedong, cited in Stenhouse, 1980:40)

The types of action research previously discussed suggest that the roles of researcher and practitioner are separate. This need not be the case, as the practitioner (in this case myself-the-teacher) can also be the researcher, hence the term practitioner action research.

Winter (1996) refers to practitioner action research as:

"... ways of investigating professional experience which link practice and analysis of practice into a single and continuously developing sequence, and which link researchers and research participants into a single community of interested colleagues. It is about the nature of the learning process, about the link between practice and reflection, about the process of attempting to have new thoughts about familiar experiences, and about the relationship between particular experiences and general ideas" (1996:14).

Thus 'practitioner action research' is seen as part of the teaching profession, part of the job, as it were. According to Winter (1996) action research provides the link between *"self-evaluation and professional development"*. Furthermore, he stresses two important points:

- The process involves reflection, i.e. the development of understanding.
- The process involves changes in practice, as indicated by the term 'professional development' (Winter, 1996:14).

There has been a resurgence of teachers as researchers in Great Britain, the United States, Australia and South Africa. Ideologically, it make sense to me that if we are indeed building the new South Africa, and if we are concerned with transformation, democracy and empowerment; then we need to start respecting teachers' personal knowledge and experience, and seeing them as experts in their own right. Instead of devaluing teachers' knowledge based on experience, we need to enable teachers to research and articulate their own knowledge base. As a future educational psychologist, I felt that the process of critically reflecting on my

own practice would enable me at a later stage to empower other teachers to do the same. Thus I became increasingly aware of the importance of myself (values, attitudes and beliefs) as the starting point in the journey of professional development. I also began to wonder whether emancipatory action research was possible in South Africa.

3.1.6 South African Application

While there has been an international resurgence of teachers-as-researchers, South Africa has the recent memory of authoritarian abuse – Apartheid. Davidoff (1993:76) notes that *"the emancipatory bandwagon, while offering a challenging and exciting journey, has not, I fear, begun to address the issue of how difficult it is to become a 'real' emancipatory action researcher in South Africa"*. She argues that the education structures in South Africa *"mitigate against the development of emancipatory action research praxis"* (Davidoff, 1993:76). She is not alone in this criticism, Pym (1993) points out that state controlled inspection directed at imparting specific values and policies has *"left teachers dependent on supposed experts, and less able to see and respond to the political, ethical and moral questions that are an inherent part of the teaching process"* (Pym, 1993:62). The result is that teachers have been disempowered and are no longer able to shape the nature of the educational experience (Pym, 1993:62).

Davidoff (1993) has been involved in facilitating emancipatory action research amongst teachers in South Africa, and has noted several problems that face South African teachers in this area:

- ***Emancipatory action research is said to be collaborative.*** However, Davidoff argues (1993:76) that in South Africa it is very difficult to establish a collaborative ethos. Teachers prefer to work in isolation, and, she continues that *"having visitors is invariably associated with inspection, that watchdog activity which teachers find undermining, disempowering and very scary"* (1993:76).
- ***Emancipatory action research is democratic.*** This suggests that teachers and pupils will have more say in classroom practices. However, Davidoff argues that the South African education system *"is notorious for its extreme authoritarianism and anti-democratic practice ... Extremely tight control over what is taught has provided little space for teachers to share their own concerns or values"* (Davidoff, 1993:77). In addition, she

continues, schools function in a *"top-down hierarchical manner"*, which enables principals to prevent changes in their schools (Davidoff, 1993:77).

- ***Participation is yet another element in emancipatory action research.*** Davidoff notes that equal participation is difficult to achieve. In addition, this refers to active participation on the part of teachers and learners; but in South Africa, teachers tend to rely passively on expert assistance (Davidoff, 1993:78).

As these were some of the difficulties that I encountered, I was relieved to read Davidoff's suggestions to cope with these difficulties. Essentially her argument is that we need to start at where the teachers are currently situated rather than impose preconceived ideas regarding *"what constitutes real emancipatory action research"* (Davidoff, 1993:80). She suggests thinking big but starting small; and treating with caution the absolute claims made about emancipatory action research such as *"symmetrical communication"; 'true consensus'; 'control of education'"* (1993:80). Instead she feels that the first steps towards emancipation can be seen in *"teachers welcoming 'outsiders' into their classrooms, or actively engaging in materials development"* (1993:80). This reduced much of my anxiety, that I did not have to be a 'perfect' emancipatory action researcher; this was just a starting point for my own development. Yet despite this I still did not feel as if I owned my research, I still felt disempowered. In a search to quiet this unease, my reading took me into the domain of teacher education where I began to internalise and own the research.

3.1.7 Teacher Research – A Shifting Centres Model

If we start where the teacher-as-researcher is at (as recommended by Davidoff, 1993), then a model for continued teacher education would be a useful starting point. McNiff (1993:18) outlines two models of teacher education, namely, the traditional or 'line management' model and the alternative, 'a shifting centres' model. Table 3.3 summarises the main assumptions of both models.

In light of the personal struggle I became involved in, in my attempts to find my way through the forest of research paradigms and methodology, McNiff's proposals were like a breath of fresh air. Suddenly everything began to fall into place.

In the first place she distinguishes between 'personal knowledge' and 'objective knowledge'. 'Objective knowledge' is that knowledge that society values and has made an explicit body.

The concept of 'personal knowledge' is based on the work of Michael Polanyi, in particular McNiff refers to his work *Personal Knowledge*, which was published in 1958 (McNiff, 1993:26). In this concept Polanyi stresses "the need for personal commitment in any act of knowing. To speak with any sort of sense, he says, I have to accept that I am an active knower" (as quoted in McNiff, 1993:26).

This view of knowledge being personal is based on two dimensions: "the need for an acceptance of self as knower, and the creative aspect of knowledge" (McNiff, 1993:26). Acceptance of self as knower simply means acknowledging that I own my own knowledge. The creative aspect of knowledge can be seen in the way that knowledge grows. Simply knowing that you know has created extra knowledge. "Knowing is an on-going act of creation by the person who makes a personal commitment to her own ability to know" (McNiff, 1993:27).

McNiff states that personal knowledge is organised dialectically and is characterised by three aspects:

- It recognises the inherent harmony of contradiction
- It balances the tension between quantitative change and qualitative change
- It proceeds via an evolutionary cycle (McNiff, 1993:28).

If one uses this concept of personal knowledge as the premise, then educational knowledge does not just include knowledge about education, but also furthers the teacher's understanding of her or his own practice (McNiff, 1993:29). The aim of teacher education and teacher research would be *"to empower the individual enquirer to externalise the intuitive, tacit understanding that underpins her practice; to air and share the values that form and inform her practice; and publicly acknowledge her commitment to those values by indicating why and how she has adopted them as a way of living"* (McNiff, 1993:30).

Table 3.3: Comparison of teacher education models

The traditional approach: A 'line management' model	An alternative approach: A shifting centres model
1. There is a standard model - a theory or a set of procedures. Teachers are invited to adopt or adapt this theory to themselves.	1. Teachers are regarded as experts, who empower themselves to offer accounts of their own practice. Teachers are encouraged actively to draw out theories, and to develop these personal theories through their accounts.
2. The teacher educator advises on the best course of action.	2. Teachers, teacher-supporters and clients are awarded equal status and responsibility for helping the other person's process of understanding to evolve.
3. The model is institutionalised. The focus is teacher's activities within institutions. The aim is usually the improvement of pedagogical situations, and often the improvement of institutionalised procedures: curriculum, management, communications.	3. The model is personalised. The focus is the understanding by the individual of her own life (the understanding of the self by the self). The aim is to improve the process of education within a particular present situation.
4. The model involves an objective approach. The research programme is predetermined as working towards specific outcomes within institutionalised procedures.	4. The model is based on a process-view of learning. There is no end product in sight, other than an 'end product' of 'no end product'; a final answer that there are only new questions; an end state that is the beginning of a host of new states.
5. Research is seen as the basis of teaching (pedagogy). It operates in terms of skills, offering a checklist of expertise.	5. Research is seen as a form of teaching which explores new ways of life that promise to be beneficial to the community of which the researcher is a part. Seen in this light, self-reflective research not only provides a proper base for teaching but is teaching and teaching becomes 'enquiry in action'.

(McNiff, 1993:18-19)

Thus McNiff provides a model that is in line with the suggestions made by Davidoff (1993) that teachers *"by accepting responsibility of their vision to transform the world – initially by transforming their personal bit of the world – deliberately engage in a critical, creative process of 'reflection in action' in order systematically to work towards a situation of recursively improving practice"* (McNiff, 1993:30).

3.1.8 Philosophical Rationale: A Summary

It is therefore within the shifting centres model that my research has taken place. This model is located within the overarching Emancipatory paradigm and the methodology of Emancipatory Action Research. It is my aim to use this model to make explicit my personal knowledge and to improve my own process of educational development. It is hoped that this experience will enable me, in my role of educational psychologist, to empower other teachers to do the same.

3.2 RESEARCH PROCESSES

In this section I intend to outline the research process as clearly as possible, so that the readers can judge the validity of the final comments, and repeat the same research if they wish. In order to do this I discuss my role as researcher, the participants, the research process, how the data was captured and analysed and finally the limitations and validity of the research.

3.2.1 Position Of The Researcher

My role as researcher was that of research practitioner. I was employed on a part time basis, for the first two terms, to teach metacognitive study and thinking strategies to learners from Grade 4 to Grade 7. While I was employed as an 'expert' in my subject area, I was also a new, female teacher in a traditional, boys only school. Although there were other female teachers, I was essentially one of the 'new kids on the block'.

My aim as research practitioner was to inform my own teaching practice and to make recommendations to the school for continued implementation.

3.2.2 Participants

Although all learners from Grade 4 to Grade 7 were participating in the programme, only the Grade 7 learners were participants in the research. I realised that using all the learners had created a data overload and that I would not be able to synthesise so much information for this research assignment. I therefore decided to concentrate my research on the Grade 7 group. I chose the Grade 7 group because they had the extra pressure of being selected for the High School based on their first cycle test results. They had to achieve 60% average in order

to be selected. I also felt that the Grade 7 group would have the most experience in studying and that they would be more capable of verbalising their feelings, beliefs and attitudes than the other grades.

3.2.3 Research Process

When I arrived at the school, I handed a questionnaire to all the teachers (Appendix B) to assess what their needs were.

I then began teaching the study and thinking skills programme to the boys from Grade 4 to Grade 7. Initially, I handed Questionnaire 1 (Appendix C) to all the learners except the Grade 4 learners. The Grade 4's were excluded as I felt that they had not had enough experience with studying, and writing tests and exams to warrant their inclusion. Then, as mentioned in the previous section, I decided to concentrate on the Grade 7 boys.

After the learners had completed their first cycle of tests (beginning of term 2), I interviewed the 3 classes (which I video taped) regarding their feelings and thoughts about the study skills strategies and also questioned them on their classroom behaviour. Unfortunately the sound clarity on the videos was poor, so I used my own observation notes. I attempted to change my classroom management style in accordance with the class discussion and needs raised.

Once the study and thinking skills programme had been completed I asked the Grade 7 learners to complete Questionnaire 2 (Appendix D).

3.2.4 Capture: Information (Data) Collection Techniques

The methods of data collection used were questionnaires, videos of class discussions and observation notes.

3.2.4.1 Observation notes

Notes were kept of meetings and lessons in order to isolate specific interactions and power dynamics. Burman (*et al.*, 1994) suggest keeping a 'running commentary' initially, which can become more focused later, based on issues highlighted in earlier analyses. These notes consisted mainly of my feelings and reflections on my interactions with classes, learners and staff, and my observations of interactions that occurred between and within classes, between staff members and between staff and classes.

3.2.4.2 *Questionnaire surveys*

The teacher questionnaire (Appendix B) consisted of a list of study or thinking skills. The teachers were simply required to tick the skills that they felt the learners required the most.

The learners received two questionnaires, one before the programme began and one after it had been completed (See Appendix C and D). The learner-directed questionnaires consisted of both open and closed formats. The closed format (Likert scale) specifically targeted impressions, attitudes, experiences, and self-concepts and was used to compare self-rated behaviours before and after the study skills implementation. This incorporated Burden's 'Myself As a Learner Scale' which I had found very useful in my Honours project (Burden, 1999). The open format of the first Questionnaire was designed to analyse themes and issues that were important to the learners. The post-questionnaire asked more specific questions regarding the programme, to gain insight into the learners' experiences and impressions of the programme.

3.2.4.3 *Class Discussion Video*

At the end of the programme a class discussion was held and videotaped with each Grade 7 class. The discussion centred on the pupils' experiences of the programme, but was also free flowing, in that issues pertinent to the different classes were allowed to be raised. Unfortunately, the sound clarity of this video was very poor and it could not be used for data collection. I used my observation notes in place of the video.

3.2.5 **Bracketing**

If one examines Kelly's (as discussed in Burman *et al.*, 1994:144) three-phase creativity cycle a useful framework can be provided to highlight the stages in the process of data analysis. Kelly's first phase is that of *circumspection*, "*a phase of unbounded wild speculation and free association, complete openness to a host of possibilities*" (Burman *et al.*, 1994:144). In this stage, the researcher focuses as widely as possible in order to obtain all relevant thoughts and issues. This was how I tried to be during the research process, keeping an open mind and trying to be aware of any variables or dynamics that had not been covered by my reading. I was concerned that I would 'miss' an important variable if I became too focused too soon.

The second phase is that of *pre-emption*, where the full range of issues generated in phase one are fully analysed and explored. This took place after the programme had been completed. The common responses were collected and then arranged thematically for interpretation.

Kelly's final phase is that of *control* where the work is brought into "*sharper focus ... The whole process is one of clarification, of ensuring that the material gathered is grounded in participant' experiences, not merely theoretical background*" (Burman *et al.*, 1994:144). My research is still in this phase. I have brought the work into sharper focus through reflecting on the themes and what they might indicate. However, although the variables and themes are grounded in the participants' experiences, I feel that I still need to contact the participants to ensure that my interpretations of their responses is indeed what they intended.

3.3 RIGOUR

Credibility of the finished research has been achieved through using triangulation (Kimchi, Polivka & Stevenson, 1991; Mathison, 1988). Triangulation of data was achieved by using different types of data such as open and closed question and observations; as well as collecting data over different time periods (Denzin, 1978; Mathison, 1988). Different data sources were also used namely three Grade 7 classes and myself (Kimchi *et al.*, 1991; Mathison, 1988). Triangulation of methodology was achieved by using both qualitative (bracketing) and quantitative techniques (statistical analysis) (Kimchi *et al.*, 1991; Mathison, 1988). Transferability has been ensured by clearly delineating the research process and context, thereby enabling research findings to be applicable to similar contexts. Dependability has been achieved by keeping a clear record of the data collection, analysis and interpretation, thus allowing other researchers to come to the same or similar conclusions as myself.

3.4 VALIDITY

McNiff views validation as '*a shared way of life*' (1993:43). She argues that validation is a social process in that:

"...one person may present an idea, which she regards as part of her personal truth, for acceptance by her peers. In presenting her idea, she also fulfils certain criteria for the justification of her idea: she shows that it follows certain standards that ascertain its internal validity (for example, it is pertinent to the individual, it is systematic, it is honest). These standards of judgement are determined by the peers who are sharing the validation process. They decide the criteria, and then they examine the idea to see if it meets those criteria or not" (McNiff, 1993:43).

I have presented this study as my 'personal truth' and feel that it is systematic and honest. I think that I have concentrated on using this *"research as a means to actively demonstrate how (I) have come to know – to show that (I) have moved in time from a satisfactory state of being in which values were denied to a more satisfactory state of being in which values are in process of being realised"* (McNiff, 1993:43). It is now up to the readers to decide if it meets the criteria for validity.

3.5 LIMITATIONS

One of the limitations of this study is that I was unable to present my findings to the participants for their comments. I think that the study would have been strengthened had I been able to gain these comments, reflect upon them and make any necessary changes to the findings. This, in my opinion, would have made the study the participatory research that I intended it to be. Unfortunately by the time the research findings were available, the Grade 7 boys had been promoted to Grade 8 and were no longer able to collaborate in the research process.

This study was intended to be emancipatory in nature. While I have gained insight into the difficulties of conducting emancipatory research, and while I have begun the journey to self-liberation; I cannot say that it succeeded in emancipating or empowering the participants and other stakeholders.

The initial research plan was to involve the teachers and parents in the process as well as the learners. Unfortunately, this never materialised, despite my efforts. Reasons for this have

been reflected upon in Chapter 5. Thus, although I have been able to provide an ecosystemic presentation of my findings, this has been generated by only one system, that of the learners. What is missing are the variables that would have been raised by the teachers and the parents. This would have created a more thorough ecosystemic exploration.

However, while I acknowledge that this study has limitations, I have gained valuable insight into the emancipatory action research process and myself-as-researcher. In addition, the ecosystemic variables generated by the learners, has made me aware of the complexity of interaction between the different systems. This has convinced me that a single-pronged intervention will not be as effective as a multi-pronged intervention that takes into account the interaction between and within the different systems.

3.6 ETHICAL ISSUES

Written consent was obtained from the school principal to conduct research within the school. The learners were informed of their right to confidentiality, and in order to maintain this, no identifiable indicators have been used in this study.

3.7 FROM IMPLEMENTATION TO FINDINGS

This chapter has made explicit my research philosophy, and has delineated the steps that I have taken in my research journey. While the research process did not proceed as planned, the findings were nevertheless of great interest to me. The following chapter provides an ecosystemic presentation of these findings.

CHAPTER 4

CONSTRUCTION

4.1 SETTING THE SCENE

This chapter consists of a systematic analysis of the research data that was collated. The focus of this research is on the qualitative data, with particular emphasis on the responses of the learners to the study and thinking skills programme and my integration of personal and objective knowledge through self-reflection. I have included some descriptive statistics in order to add depth to the interpretation of the qualitative data. The descriptive statistics have been gained from the closed questions (likert scale) in the pre- and post-intervention questionnaires.

Thus, this chapter begins with my observations and reflections of the process. I have attempted to set out my observations and reflections within an ecosystemic framework, in order to provide coherence and continuity. My personal observations of the individual system are replaced by the learners' self-reports garnered from the open questions in the first pre-intervention questionnaire. Here I have attempted to present a thematic overview of the individual system and the learners' perception of themselves, and their friends, family, school, subjects and teachers.

The second part of the analysis consists of the learners' responses to the programme. This section consists of three parts: Firstly, a thematic analysis of their written responses about the programme (Questionnaire 2: open format questions); secondly a statistical analysis of their rating of the different modules according to their perceived usefulness; and thirdly a statistical analysis comparing pre- and post-intervention habits of the learners.

4.2 MY STORY

The following information attempts to outline my observations and reflections, from my notes using an ecosystemic framework. It is important to emphasise that this is

'my story' and is not an attempt to provide an objective description of my observations. As outlined in the methodology chapter, the researcher is seen as being part of and impacting on the participants in multiple dyadic relationships, where all systems and parts thereof, are involved in a continuous process of mutual interaction. Thus, it is important that my observations, reactions and reflections be recorded in the subjective way that they were experienced, as this will have impacted on the research intervention.

The social, political and economic systems have been well documented elsewhere, therefore this account of my observations begins with the school system, moves onto the parent system and finally the individual system.

4.2.1 School System Variables

This section highlights variables that are located within the school system that could be impacting on the learners. This brings together themes relating to the school structure, including race and gender demographics and the variables connected to the school ethos. Teacher interactions, teacher roles, classroom climate and class identities and liaisons are explored.

4.2.1.1 School Structure: Race and Gender Issues

The teachers were predominantly white, with only three teachers of colour, one of whom was Xhosa-speaking. I found it interesting that the primary Xhosa teacher was a white man, while the secondary teacher was a Xhosa woman. The auxillary teaching staff (remedial, school counsellor etc.) were white women. All the non-teaching staff at the school were people of colour, except the grounds foreman who was a white man, and the secretaries and book-keeping staff who were white women. The three teachers of colour held 'low-ranking' teaching positions, only one of them was a class teacher, the Xhosa teacher was part-time, and the third was the junior music teacher. I wondered how this might impact on the self-concept of the learners of colour, as the majority of people of colour employed by the school held low ranking positions. The implicit message of such a system of hierarchy could be very disempowering to learners of colour.

The male-female ratio of teaching staff was predominantly female, there being 23 female to 13 male teachers. The hierarchy of the school was dominated by white males with the three most 'powerful positions', those of principal and deputy principals filled by white men, the next ranking teacher was a white woman. The higher grade (5-7) class teachers were mainly men, with only 2 of the 11 teachers being women; yet there was only one male class teacher in the lower grades, and he took a Grade 4 class. The lower grade ratio was 1 man to 15 women. From Grade 5 to 7 the Head of the Grade was male, whereas from Grade 1 to 4 the Head of the Grade was female. My time in teaching has made me very aware of the subtle ranking that occurs amongst teachers within a school. This is usually based on a variety of factors such as gender, age, years of teaching experience, level of sports involvement (first team rugby coach outranks debating teacher), the grade that you teach (a grade 7 class teacher usually outranks a grade 4 teacher) and other factors. In my opinion, the learners, particularly as they start to reach the higher grades (6-12), are also very aware of this subtle but powerful 'pecking order'. This school clearly demonstrated a hierarchy that was male dominated. While this was a 'boys only' school and thus the learners' self-concept will probably have been positively effected; I wondered to what extent such a system impacted on the relationship between female teachers and their classes, particularly in the higher grades.

The pupils were not much more reflective of South Africa's population groups, being still predominantly white, the next largest group being people of colour, within which African pupils were the least represented. In Grade 7, for example, of the 80 learners, 64 were white learners and 16 were learners of colour, of whom only two were indigenous Africans. I felt that the learners of colour would be experiencing difficulty in an environment where they were a definite minority and where the school culture may have been different to their home culture. These learners may have been experiencing additional pressures of adjustment and accommodation to their white classmates. Indeed, it did seem as if many of the learners of colour had allied themselves with the 'alternative, rebellious' peer groups, possibly to increase their peer status or find acceptance. The school still reflected a Christian bias, which could have been problematic for the Islamic learners. Certainly some of the Islamic learners were unable to take part in the school extra-curricular programmes, as they had to attend Islamic school in the afternoons.

No learners with physical, or psychological difficulties (for example, sight, hearing and motor co-ordination difficulties; Tourettes Syndrome, Downs Syndrome or Cerebral Palsy) had been included in the school; as should be the case according to the government policy (South African Schools Act, 1996). The learning difficulties that I evidenced were of a low level (mild ADHD and fine motor co-ordination difficulties).

I was particularly conscious of the conflicting messages propagated by the male teachers. On a conscious level the boys were being taught to be aware of discriminatory practices; yet boys who complained or did not perform well on the sports field were referred to as 'girls' and 'old ladies' ('you tackle like a girl', 'stop whining like an old woman'). Several of the female teachers found this practice unacceptable. Even the principal was guilty of this behaviour, for example, he once used a very badly written letter signed by 'dumb blonde' to represent a particularly negative attitude that he wanted the boys to move away from (I found this highly offensive). He did not seem to consider the impact that such a statement may have on the relationship between blonde female teachers and their classes. However, any overt form of racism displayed either by the boys to, either fellow pupils or staff (teaching or non-teaching) or vice versa was taken very seriously. One boy who made racist comments to his Xhosa teacher was given a written warning and threatened with suspension if there were further occurrences.

Although the staff was making conscious efforts to eliminate prejudice, the idea of white male supremacy was still strongly propagated through the hidden curriculum. I believe that these 'hidden' messages and attitudes impacted on my relationship with the boys as I was awarded less respect than a male counterpart and thus issues of discipline became problematic.

However, as a reflective practitioner I need to question to what extent my own beliefs regarding race and gender issues have swayed my interpretation of what was happening. To his credit, I believe that the principal was actively involved in creating a more equitable situation, but considering the nature of such a school he is obliged to move slowly (although this is my opinion only).

4.2.1.2 School Ethos

I was impressed with the 'Renaissance approach' to the boys' education which, while placing a strong emphasis on high quality of academics, also placed importance on a holistic approach to education; including, sport, music, art, chess, debating and community service.

The ethos of the school was, for me, surprisingly supportive. Having taught at a 'boys only' school before I was not expecting the attitude of caring that I found at this school. There was no doubt in my mind that the teachers really cared for the welfare of the boys and were concerned for their spiritual, emotional and physical development as well as academic. Evidence of this was to be seen in the amount of time spent working with individual boys remedially or through counselling and the weekly meetings that took place between class teachers (who felt that certain boys needed additional support or intervention) and support staff (such as the school counsellor, the remedial teacher, the physical education teacher and the principal). The boys were encouraged (not forced) to participate in activities and experiences that would lead to character development and self-knowledge (away trips, cooking competitions, leadership courses). While I was critical of some areas of the school practices, I felt that the staff wanted to move forward, and that they were a dynamic, committed group.

This situation was fostered by the principal who was enthusiastic about continued training and staff development. He actively encouraged self-development and definitely inculcated an ethos where staff members were encouraged to take ownership of their own 'personal knowledge' and take pride in it. He encouraged teamwork, solicited advice and focused on democratic management practices that aimed at empowering staff members. In comparison to other male principals that I have worked with, he truly had an open-door policy and was prepared to seriously listen to his staff and any complaints or recommendations that they might make. Indeed, it was not unusual, to see one of the boys 'pop in' to speak to him.

While the school was very forward thinking in its attempts to broaden the experiential basis of the boys with regard to leadership and away trips; there was much resistance by the staff to the concept of Outcomes-based Education and continuous assessment

(portfolios in particular). It was very clear to me after one staff meeting that the teachers did not really understand what was meant by these concepts and were rejecting what they thought it entailed: extra work and a lowering of standards. There had been no attempt at inclusion of either physically or developmentally challenged learners.

4.2.1.3 Teacher Interactions

The teachers worked together as a team, with many meetings and committees being convened to ensure the smooth running of departments (academic and non-academic) and projects. Yet, despite this teamwork, teachers still seemed to be territorial in their reluctance to allow or to initiate class visits. I invited a number of teachers into my (actually their) classroom to see what their classes were being taught, but not one teacher, other than the principal, took up my invitation. Nor was I ever invited into another teacher's class. There could have been many reasons for this, such as fiercely guarded free periods, high work levels, teaching other classes during the same time period or a reluctance to invade another teacher's domain. Interestingly, there seemed to be strong resistance to Outcomes-based Education and the use of continuous assessment.

Only one teacher returned my very user-friendly questionnaire (tick the appropriate box) that asked them which study and thinking skills they felt would be most useful for their classes to learn. I reflected on this and was not sure why the questionnaire was not returned, it could simply have been that most teachers forgot as they were very busy.

The teachers were intensely concerned with the emotional welfare and personal self-growth of all the boys. While the quality of curriculum and lesson planning was good; the teaching methodology remained predominantly traditionally teacher-centred, 'talk and chalk'; where the learners seemed to be receptacles of information.

The staff worked together well and I was pleasantly surprised at the low level of staffroom 'back-biting' and criticism of the management team. This indicated to me that, in general, the staff were happy with the situation at the school and the way in which it was managed. What did amuse me was that the staffroom was still split in the 'time-honoured' (sic) tradition of male and female groups, with very little mixing.

4.2.1.4 Programme Fit

I was greatly troubled by the question of 'where did the programme fit'? Unfortunately, the programme was isolated from other subjects, despite my attempts to integrate it by using materials from the other subjects and trying to get the class teachers on board. My requests for teaching material that the teachers felt the learners would benefit from spending extra time on, were never met. I felt that the isolation of the programme was hindering the boys' ability to transfer the study and thinking skills to their subject material, despite the fact that I finally commandeered materials that they were working on in class.

It was while using the materials prepared by the other teachers, that I was again confronted with a problem that I had encountered while working privately. Many teachers who prepare notes for their classes use a very poor structure or none at all around which to base the content. The result of this is that it is very difficult for learners to make sense of notes that do not have a clear structure, especially when there is also no course outline or outcomes. This is very common when teachers have made notes based on thematic teaching approaches, where bits and pieces have been copied out of various books in a resultantly incoherent and jumbled manner; where not even the numbering system is matched. Thus another facet to ensuring the successful transfer of skills is to ensure that the teachers have the same skills (which is often assumed but rarely the case) and are able to adapt them to suit their subject criteria.

I saw each class only once a week for one hour; and many of the boys viewed this as a free period as there were no tests (which raises issues regarding test-based learning). In addition, I was not based in my own classroom, which also detracted from the 'status' of the programme, reinforcing the idea that this was an 'extra' and of no value. Although many of the boys did not seem to take the programme seriously; there were just as many who were very interested and wanted help in improving their results. Some learners had individual lessons at the same time as the study and thinking skills programme, and these boys expressed great disappointment at not being able to attend the weekly sessions.

I became strongly convinced that it was necessary to teach a study and thinking skills programme both separately and within the subject. In addition, I felt that it was important that the teachers (and parents) learn the same skills so that they can foster the development of the skills.

4.2.1.5 *Teacher's Role*

I also found that my teaching role (myself-as-teacher) had many different facets. I was a new teacher, part-time and yet an expert who had been specifically hired for my knowledge and experience base. This was further complicated by the fact that I am a youngish, blonde woman. I felt that people had difficulty putting the pieces together – they saw the 'young blonde woman' and were at times surprised when I spoke authoritatively on an area of expertise (to the school chairman). Some garnered all the information that they could (usually women) while others seemed threatened by my supposed 'expert' status (usually men). I was both a part of the school and yet not, because I was part-time I did not have the extra-curricular activities of the other teachers. I think that it was difficult for the other teachers to fit me into the 'pecking order', especially as I was high school trained and had taught matrices.

4.2.1.6 *Classroom Climate*

I found that my natural style of facilitation did not mix well with the more authoritarian nature of discipline in the school. Some of the classes saw this teaching style as an opportunity to misbehave, although other classes remained eager to please. I had difficulty divorcing this 'natural' misbehaviour from a rejection of the programme and ultimately myself. At times, I began to hate the teacher that I was forced to be in some classes – and I saw myself becoming a 'bitch troll from hell'. I tried to be as open as possible with the boys and discussed with them how their behaviour forced me to behave in certain ways that had negative repercussions on themselves –but this was not effective. Certain classes expected and wanted external discipline, and I was requested on several occasions to 'be more strict and punish us'. I found this situation problematic as it ran counter to my own way of being as a teacher.

In addition, my methodology focuses on much application and discussion by the boys themselves rather than 'talk and chalk' methods. The classroom design was usually with the desks in rows with only one class having group tables. This also hindered the

efficacy of the programme and could be disruptive as group activity inevitably led to much moving around and boisterous behaviour. I think a classroom of my own, already set out in groups, would have greatly improved the situation.

4.2.1.7 Class Identities, within Class Factions and Liaisons

Classes had developed 'identities' that they lived up to. This occurred on a continuum where some classes considered themselves 'boffins' and were hardworking classes with academic reputations to maintain; whereas others were 'rebel' classes which took great delight in being the 'worst class in the school'.

Within the classes there were groups of learners who had their own identity and had created sub-cultures within the class. Again the group identities differed, with some being rebellious, or 'class clowns' while others were hardworking or responsible. There were a few boys who were ostracised by all the groups, and were often verbally abused and rejected during group work. These were usually the less physically adept boys (overweight) or ones with behaviour difficulties (stealing) that even their peers would not accept.

4.2.2 Family System Variables

The variables that were identified within the family system revolved around parent involvement and family problems.

4.2.2.1 Parental Involvement

There was little parental involvement with academics although there were high levels of parental involvement elsewhere. I picked up an almost defensive feeling that teachers did not want parents involved within the classroom other than to baby sit classes while teachers were away.

I was surprised that, even though I offered the school evening-courses for parents (at no cost) on how to support their children, this never materialised. It maybe that the school was too busy or that the school was unsure of me, and thus reluctant to expose me to the parents or any other number of reasons. In the six months that I was there only one parent (mother) contacted me to find out how her son could be further supported at home.

4.2.2.2 *Family Problems*

Some of the learners exhibited learning difficulties and behavioural problems as a result of family problems. Issues such as divorce, poor relationships with step parents, and being isolated from their families because the learner stayed in the boarding establishment affected the way some of the learners behaved in class and after school. Some boys were 'teased' about family difficulties which led to emotional eruptions in class.

4.2.3 *Peer System Variables*

The peer system definitely played a large role in dictating the behaviour of boys within the classes. In hardworking, 'academic' classes, learners who misbehaved were not reinforced by the rest of the class; whereas in the 'rebel' classes, the opposite was true. Most of the boys belonged to a subgroup identity and conformed with that identity. There were a few boys who were rejected by all of the groups.

I observed a large amount of verbal abuse within the classroom environment, what the boys referred to as 'dissing'. In fact, I was so concerned about this behaviour that I held a session about 'dissing', its effects and alternative behaviours with all classes from Grade 5 to Grade 7. The 'dissing' went way beyond normal classroom teasing and was severely damaging (emotionally and self-esteem) in its nature. At times, there were what seemed to be 'faction fights' within classes, where two sub-groups would verbally harass each other. This abuse could at times be so pervasive and subtle, that one small comment could elicit an emotional response out of proportion to the comment. Some boys were targeted and 'set up' during break or during classes with teachers who were not aware of the behaviour, so that they would be pushed to breaking point and then 'explode' in class or a certain teacher's class, and then be punished by that teacher, to the great delight of the tormentors.

4.2.4 Individual Variables

In this section I have chosen to use the learners' self –reports (open-questions in questionnaire 1) rather than rely only on my own observations. This should be enable a more in-depth and accurate representation of how the learners see themselves and significant others in their environment.

4.2.4.1 Self-concept (*I think I am*)

This was an interesting question as it indicated that the learners were already internalising labels that they were receiving from their environments. These labels generally indicated either positive or negative self-concepts; but sometimes there was evidence of learners internalising 'alternative' positive labels. The latter were labels that did not conform to the accepted ways of behaving (sic), but were seen as positive by the individual. The basic themes revolved around academic ability, sporting ability, behaviour, appearance and popularity.

Seventeen learners wrote comments that indicated good academic self-concepts, these included the following: 'I am clever but I daydream'; 'I am clever but I work hard'; 'I am bright'; 'I am a good learner'; 'I am a good school academic'; 'I am a quick learner, responsible, very creative and very talented'; 'I think I am excellent, my opinion is the best'. Eleven learners considered themselves as poor to average students, making comments such as: 'I am dumb'; 'I am below average'; 'I am a daydreamer'; 'I am average'; 'not so clever'.

Nine learners reported themselves as good at sport, either in general or specifying a sport. Only three mentioned not being good at sport. In this question the only sport directly referred to was rugby and cricket. Some examples of comments are : 'good at sport'; 'skilful at sport'; 'great sport player'; 'good at cricket'; 'good at rugby'; 'not good at sport'; 'average at sport'.

Some of the learners described themselves in terms of behaviour, using both positive and negative labels, sometimes simultaneously: 'I am well-mannered and behaved'; 'I have personality and humour'; 'I am self-confident, cheeky and anxious'; 'a softy'; 'too silent and shy'; 'irritating'; 'talkative, musical and friendly'; 'good and generous'; 'nice

guy'; 'shy and lacking in confidence'; 'impatient, out-going, like fun things'; 'a nuisance, very selfish, sulky and fussy'; 'introvert and fussy'.

Four learners made reference to their appearance. Only one described himself as 'good-looking'; the rest made negative comments such as 'I am a dwarf'; 'I have big teeth'; 'I have a bad figure'.

As mentioned before, some of the learners seemed to be in the process of internalising labels that were 'alternative ways of being' to the 'traditional' school behaviour. Some examples of these self-descriptions are: 'cool, funky, hiphop boy who uses his brain for benefits'; 'funky'; 'witty, funny, sexy'; 'clever outside school but not inside, 'cos outside school not pressurised'; 'cool'; 'I am opting out of school, I'd rather be at home'.

4.2.4.2 *I am good at*

In response to this question the learners wrote a far more comprehensive list of what they considered themselves good at. Again sport featured prominently with 102 statements specifying that the learner was good at sport in general, or specific sports. This time the list of sports was far greater than the previous one. Rugby was the most mentioned (19), followed by cricket and swimming (9 each); while 24 learners considered themselves good at sport in general. The sports listed were: rugby, cricket, swimming, waterpolo, running, basketball, soccer, American football, tennis, squash, hockey, baseball, archery, boxing, table tennis, surfing, climbing, body boarding, judo, SCUBA, ice-skating.

Many of the learners considered themselves good at academics, with 25 learners mentioning academics in general and 35 learners specifying subjects. Science and maths were mentioned the most (7 each).

There was a long list of hobbies that the learners considered themselves good at, the most frequently mentioned were reading (12), and computer games and Sony Playstation (15). The rest covered aspects such as: 'good with babies and children'; 'spending money'; 'making friends'; 'looking after pets'; 'eating and sleeping'.

4.2.4.3 *I am bad at*

Sport featured prominently again, with five learners considering themselves bad at sport in general and thirty-five learners mentioning specific sports. Cricket was mentioned the most (10), followed by rugby (7).

Academics was also a major theme, with sixteen learners considering themselves bad at schoolwork in general, and forty-five mentioning specific subjects. Afrikaans was referred to the most (15), followed by Xhosa (8) and Mathematics (6).

The rest of the comments referred mainly to behaviours, twenty-two of which were related to academics (writing neatly, sitting still and concentrating), the others covered a wide variety of behaviours such as: 'getting up'; 'going to bed'; 'cooking'; 'dealing with people' and 'staying out of trouble'.

4.2.4.4 *My teachers are*

Generally the learners had good things to say about their teachers; with 86 positive comments and 17 negative comments. Sixteen learners stated that the teachers were strict and I was not sure if this was a positive or negative comment in light of my own experience, where the learners had requested that I be stricter. Of the positive comments thirty-two learners referred to their teachers as 'nice'. Other positive comments were: 'cool'; 'helpful'; 'teach well'; 'friendly'; 'kind'; 'well-trained'; 'experienced'; 'funny'; 'fair'; 'explain well'; 'creative'; 'smart'; 'laugh a lot'; 'play with the kids'; 'very good'; 'willing to teach'; 'understand us'. The negative comments were very varied, examples are: 'teachers don't like me'; 'boring'; 'biased'; 'unfair'; 'loud'; 'a drag'; 'give me frights'; 'difficult to speak to'; 'shout'; 'uncool'; 'mean'; 'cold-blooded' and 'evil – don't understand that I'm the king of chat'.

4.2.4.5 *My subjects are*

Twelve of the learners simply listed their subjects. Others made positive (33) or negative (11) comments about studying in general. Some examples of the positive statements are: 'fun'; 'interesting'; 'cool'; 'quite difficult but fun'; 'exciting'; 'good at all 'cos I learn hard'; 'easy to learn but hard to do'. Examples of the negative comments are: 'mostly boring, but then school is not supposed to be the best time of your life';

'sum suck'; 'too hard'; 'difficult'; 'boring'. Many of the learners specified subjects that they liked or were good at (76), and those that they disliked or were bad at (20). Science was very popular (16), followed by geography (12) and English and history (9). Afrikaans gained the most negative comments (7) followed by mathematics (5).

4.2.4.6 *My school is*

The response here was overwhelmingly positive (102) with only a few negative comments (11). Some examples of the positive comments are: 'fun'; 'best school in Western Cape/ South Africa/ the world'; 'cool'; 'great'; 'good education'; 'buzzing'; 'funny'; 'very nice'; 'exciting'; 'I really like it'. Examples of the negative comments are: 'boring'; 'not enough discipline'; 'always banning things'; 'should have girls'.

4.2.4.7 *My friends are*

Five of the learners listed their friends. Most of the learners seem to have good friendships, with 113 positive comments to 5 negative comments. There seemed to be an emphasis on the quality of the relationship rather than image-consciousness: 'loyal'; 'kind'; 'sharing'; 'help me'; 'friendly'; 'honest'; 'fun'; 'can trust them'; 'supporting'; 'caring'; 'there when needed'; 'not because of material reasons'. Some of the learners did describe their friends in a more image-conscious way: 'cool'; 'smart'; 'clever'; 'good at sport'; 'rappers'. The negative comments were: 'tease me'; 'not many'; 'strange-abnormal'; 'don't get on well'; 'unreliable'.

4.2.4.8 *My family is*

Seventeen learners simply listed their family with no qualitative response. The responses generally described their relationship with one of their parents or siblings, commented on their family as a whole, or made reference to some family difficulty or trauma. Fifteen learners made direct reference to their parents or siblings: 'stepmom not nice'; Father – 'makes lame jokes/ humorous/ strict/ serious'; Mother – 'always complains/ bakes delicious cakes/ is kind/ outgoing/ wonderful/ fun'; Siblings – 'hate him/ love them/ hurts me/ tease-fight with them'. Eleven learners referred to separation in or from their families, either living in the boarding establishment or with other family; four of these made reference to divorce. Two mentioned trauma, one learner's father had died and another learner's father had been bitten by a shark. Other

than this the comments were very positive (79), some examples are: 'cool'; 'loving'; 'supportive'; 'caring'; 'fun'; 'helpful'; 'the best'; 'always there for me'. There were nine negative comments about the family: 'get on nerves'; 'pretty weird'; 'stressed'.

4.2.4.9 *You should know that I*

In response to this question the basic themes were areas of concern to the learner (illness, family problems, academic problems); achievements, interests or hobbies that they wanted me to be aware of; or their likes and dislikes with regard to school. Twenty-eight learners felt that there was 'nothing' that I needed to know about them. With regard to the first theme (illness, family problems, academic problems) some of the responses were: 'I have a hole in my heart'; 'I have allergies'; 'I am dumb'; 'I am bad at studying'; 'my parents are divorced'; 'I am one year young for my grade'; 'I have a quick temper'; 'don't like my stepmom - she's from the Philippines and my friends make fun of me'. Some of the responses that fall into the second theme (achievements etc.) are: 'best squash player'; 'Western Province rugby'; 'SRC councillor'; 'I love animals'; 'computer fanatic'. The final theme (likes and dislikes) consisted of comments such as: 'I don't like being pushed around'; 'I don't like being pressurised'; 'I like funny teachers'.

4.3 LEARNERS' VIEW OF THE PROGRAMME

The learners' views of the programme consists of a summary of the ratings that they allocated to each module of the programme and the themes provided by the questionnaires.

4.3.1 Module Ratings

The learners were asked to rate the different modules of the programme on level of usefulness. The learners were asked to give a score out of 10 to each module, where '1' was not at all useful and '10' was very useful.

To interpret the results a score of 1-3 was considered to represent that the learner had not found the module of much use, 4-6 meant that the learner had found the module to have been fairly useful, and 7-10 indicated that the learner had found the module to be very useful. Table 4.1 below indicates the spread of scores.

As can be seen in the table above, Mindmaps was considered to be the most useful skill, with 70.69% of the learners rating it as very useful. Thinking skills came next with 67.92% of the learners rating it as very useful, and Memory skills came third with 50.94% of the learners rating it as very useful. Muscle reading was rated the least useful by the learners, receiving 23.72% of responses in this category.

This was closely followed by the Column Method of notemaking with 22.40% of learners rating it as least useful. Interestingly Muscle reading received 47.45% and Column Notes 37.93% of the responses for the 'fairly useful' category. Which means that these modules were perceived to be of some use.

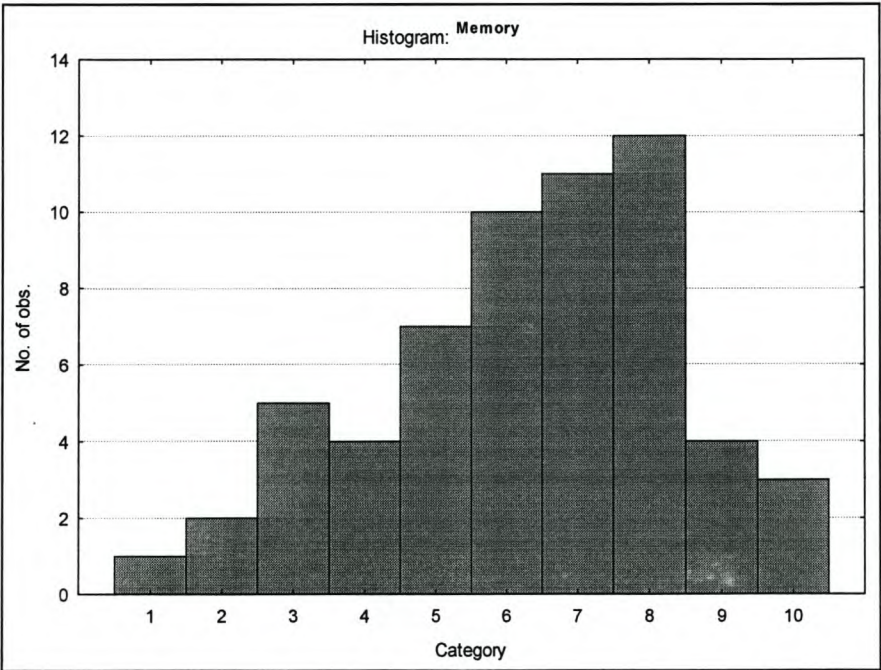
Table 4.1: Learner ratings of Study and thinking skills programme modules

Rating Scale	Memory Skills		Muscle Reading		Mind Maps		Column Notes		Thinking Skills	
	No. Res	%	No. Res	%	No. Res	%	No. Res	%	No. Res	%
1	1	1.69	4	6.78	1	1.72	5	8.62	2	3.77
2	2	3.39	5	8.47	1	1.72	4	6.89	1	1.89
3	5	8.47	5	8.47	2	3.45	4	6.89	3	5.67
Not Useful	8	13.55	14	23.72	4	6.89	13	22.4	6	11.33
4	4	6.78	7	11.86	3	5.17	7	12.07	1	1.89
5	7	11.86	14	23.73	6	10.34	9	15.52	4	7.55
6	10	16.95	7	11.86	4	6.89	6	10.34	6	11.32
Fairly Useful	21	35.59	28	47.45	13	22.4	22	37.93	11	20.76
7	11	18.64	6	10.17	12	20.67	9	15.52	13	24.53
8	12	20.44	7	11.86	11	18.99	5	8.62	8	15.09
9	4	6.78	2	3.39	10	17.24	4	6.89	8	15.09
10	3	5.08	2	3.39	8	13.79	5	8.62	7	13.21
Very useful	30	50.94	17	28.81	41	70.69	23	39.65	36	67.92
Total No. Res	59		59		58		58		53	

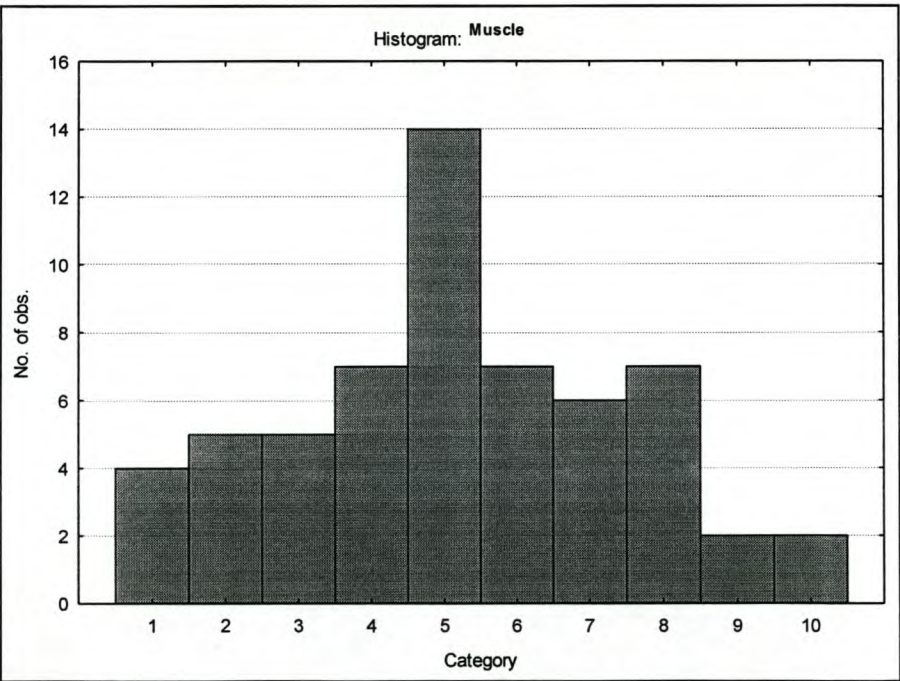
The histograms below have been included to provide a diagrammatic representation of the distribution of the responses for the different modules. Again, it can be clearly

seen that Mindmapping skills and Thinking skills were considered to be the most useful of the skills, with Memory skills being considered the next most useful and Column Method and Thinking skills only fairly useful.

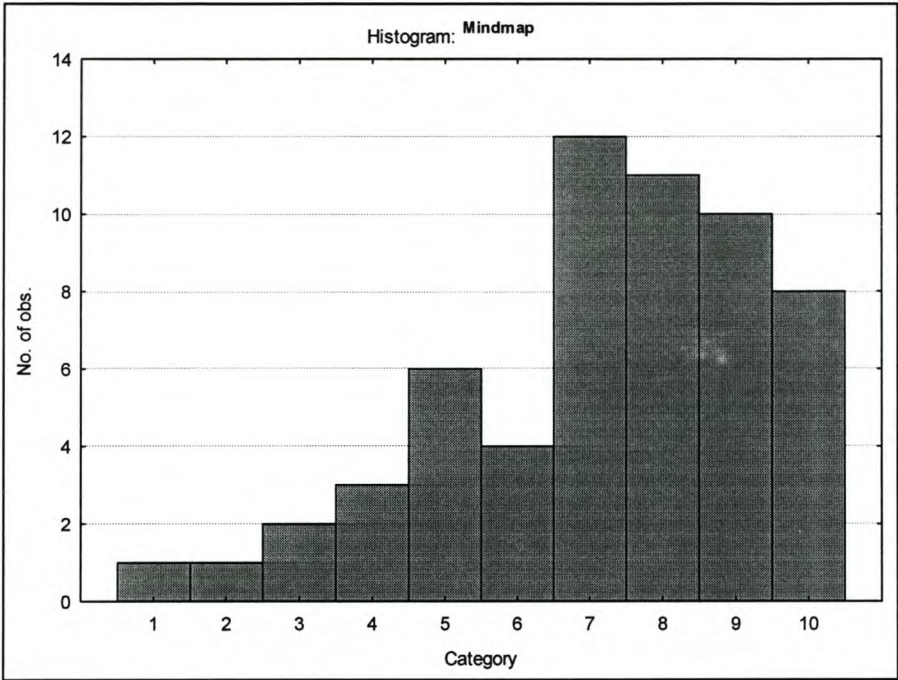
Histogram 4.1: Memory Skills



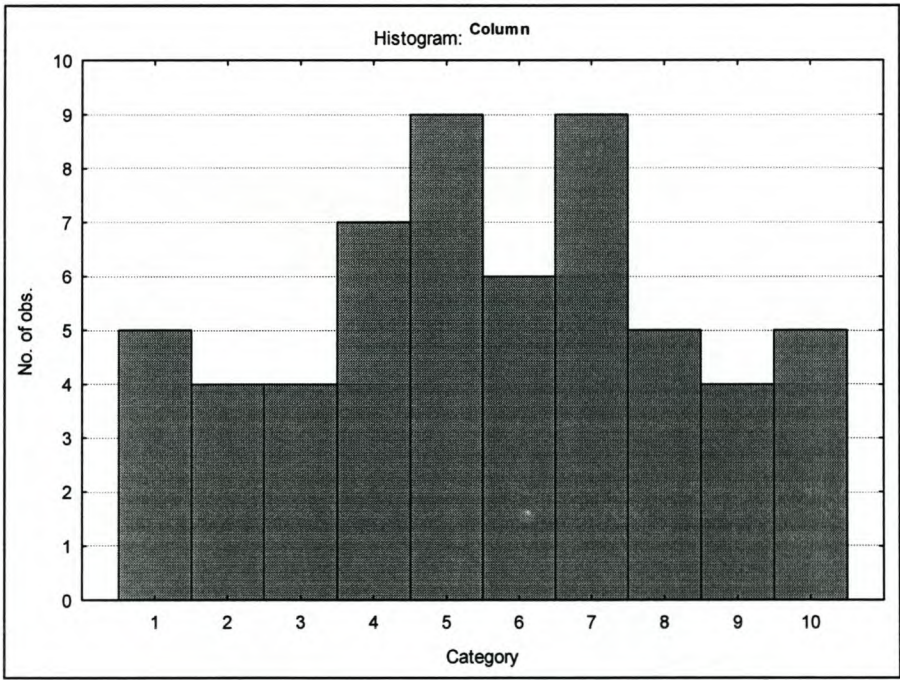
Histogram 4.2: Muscle Reading

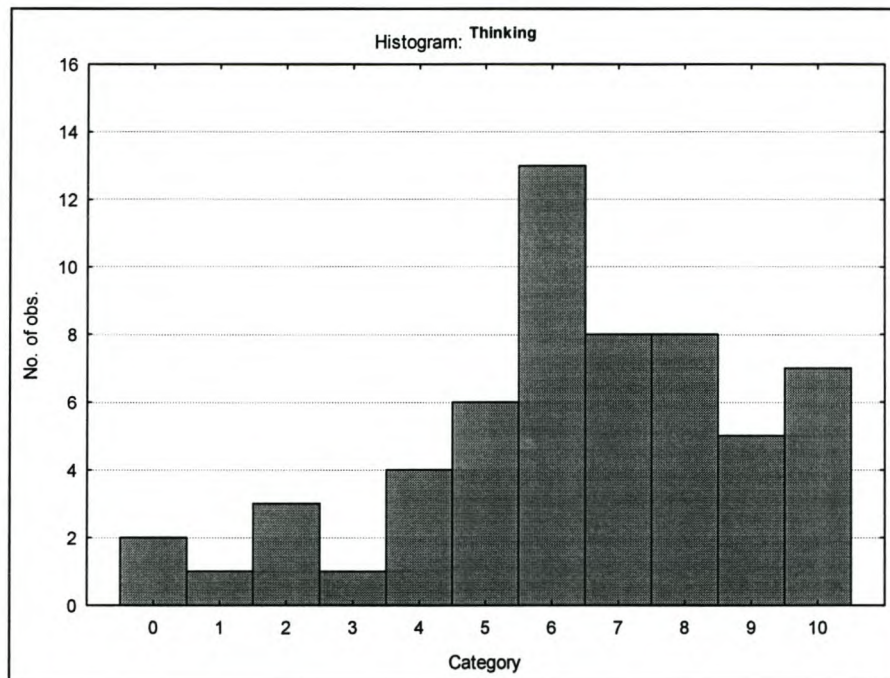


Histogram 4.3: Mindmap



Histogram 4.4: Column Method Notes



Histogram 4.5: Thinking**4.3.2 Questionnaire Themes**

These were the themes that collated from the questionnaires.

4.3.2.1 More Ways To Study

Forty-five of the learners mentioned that the course had provided them with new ways of studying. Some of the learners mentioned specific skills that they were now using, such as mind mapping (10 learners); memorising (6 learners); column method (5 learners); thinking (3 learners) and muscle reading (1 learner). The remaining twenty-three learners stated that they had acquired new skills but did not specify any particular skill.

Three learners reported that they did not find specific skills useful, 'muscle reading is boring' (2) and 'mind mapping too long' (1). Four learners stated that they preferred their own techniques. Three learners felt that they had not learnt 'anything useful' (1), that the skills were 'no help' (1), and had not learnt 'other techniques' (1)

4.3.2.2 Use of Time

Five learners commented on how the study skills had helped them to use their time more effectively, by reducing study time or enabling them to schedule their time more effectively.

One learner mentioned that the new methods took 'too long'.

4.3.2.3 Better Memory Skills and Easier Studying

Improved memory was mentioned by twelve learners, nine others referred to the fact that it was easier to study, six learners felt that they could now learn better, and four learners reported that the skills were 'helpful'.

Seven learners felt that the skills did not help them to 'study better' or 'learn easier'.

4.3.2.4 Understanding of how to Study

It was interesting to note that some of the learners commented on how their understanding of the process of studying had changed. They referred to studying the 'correct way' (4) and that they now understood how to study (4). One mentioned that he now thought about how he studied. Three others commented on how the course had added to the techniques that they already knew. Another wrote that he was now actively involved in the learning process.

Four learners wrote that they were not applying the techniques and one felt that he had not learnt 'anything useful'. One was concerned that it 'didn't always work'.

4.3.2.5 Improved Marks

Improved marks were reported by fourteen learners, yet nine other learners stated that there had been no improvement in their marks, and another two commented that they had not reached their targets of full marks and 80%, respectively.

4.3.2.6 Concentrate and Work Independently

Three learners mentioned that the skills enabled them to 'work more independently'. Six reported improved concentration, stating that they felt that they were able to 'focus more' (2), to 'concentrate in class' (3) or 'not get distracted' (1).

Yet six other learners were disappointed that they still had difficulty concentrating, listening in class or sitting still.

4.3.2.7 Changed Attitude

There were quite a few reports of changed attitude that varied from being able to work harder (2); that 'homework was now fun' (1), that there was increased motivation (1) and that they 'think better about studying' (2). One mentioned he now realised how important school is.

Another student wrote that it did not 'stop him being irritated when learning', one felt learning was 'still boring', while another felt that it had not helped him 'want to study'.

4.3.2.8 The Course

Other comments were that the skills were 'easy and fun', 'very interesting', 'looked forward to every lesson', 'study skills is nice!' and eight learners stated that it was a 'very good course'. Seven learners felt that it had been very helpful and one mentioned that the course 'should continue'.

Other learners mentioned that it had been a free period (1), a waste of time (1) and that I should have been 'more strict' (1).

4.4 PRE- AND POST-INTERVENTION COMPARISON

A comparison of the learners' habits before and after the intervention was undertaken to see if the learners had begun to implement the new skills. I felt that the fact that the learners' rated the modules as useful did not necessarily mean that they had implemented these skills when learning.

The literature indicates that certain behaviours increased the likelihood of academic success. The behaviours were grouped under the headings Classroom habits, Study habits, Personal habits and Self-concept. The closed-question sections of the questionnaires were measuring the extent to which certain habits or beliefs were used by the learners: a=never, b=occasionally, c=half of the time, d=nearly always, e=always. Thus each question in each section (Classroom habits, Study habits, Personal habits and Self-concept) was allocated a score. In order to do this the Likert-scale 'a-e' was given a corresponding number '1-5'; thus, a=1, b=2, c=3, d=4, e=5. For example then the first question under Classroom habits, 'I have a positive attitude in class, would score as follows: a=never=1, b=occasionally=2, c=half of the time=3, d=nearly always=4, e=always=5; with the higher score being more desirable. Some of the questions were written in the negative or were undesirable behaviours and therefore were reverse scored. For example, Classroom habits, question 4 'I am easily distracted in class' reverse scores as follows: a=never=5, b=occasionally=4, c=half of the time=3, d=nearly always=2, e=always=1.

The pre- and post-intervention questionnaire scores were then compared using T-test analysis. The following results were obtained:

Table 4.2: Pre- and post-intervention T-test results

	Classroom Habits	Study Habits	Personal Habits	Self- concept
N=	59	59	59	59
AVERAGE	0.366667	1.516667	0.566667	0.566667
STDEV	9.742388	11.82427	9.553359	9.553359
T=	0.289089	0.98524	0.455615	0.455615
P-VALUE =	0.773544	0.328599	0.650368	0.650368
Null Hypothesis	Do not reject	Do not reject	Do not reject	Do not reject
Reject the null hypothesis Ho: if p-value < 0.05				

The null hypothesis for the above comparisons was that there would not be a difference between the pre- and post-intervention scores. None of the sections showed a significant difference (p-value <0.05), therefore the null hypothesis was not rejected. This essentially means that the learners did not significantly change their learning

habits or their self-concept after the intervention programme. This then raises an interesting question, if the learners' found the skills to be useful (refer back to table 4.1.) why did they not change their learning habits?

4.5 FROM DISCUSSION TO REFLECTION

This section has highlighted the complexity involved when dealing with individuals. Even though the variables highlighted were gained from self-reports within the individual system, they covered nearly all of the systems in which the learners were located.

The following chapter will attempt to interpret and make sense of these findings. I will also reflect on areas in which my 'personal knowledge' has grown.

CHAPTER 5

REFLECTIONS ON PERSONAL KNOWLEDGE

5.1 FRAMEWORK OF REFLECTIONS

It is my intention in this chapter to consider what I have learnt, as a reflective practitioner, that will inform my future practice as an educational psychologist in continued research and the implementation of study and thinking skills programmes. The focus is on the development and expression of my 'personal knowledge', the fact that the theory has now become alive for me and is no longer external, imposed 'objective knowledge'.

In order to do this, the first section consists of my reflections on what I have learnt about the implementation of study and thinking skills programmes. This section will be set out in an ecosystemic framework and will also refer back to the research problem that was posed at the outset of this research assignment. The second section will focus on the implications that this research will have on my future practice. It will briefly reflect on the areas that I agree and disagree with existing theories regarding the implementation of study and thinking skills programmes; and will contain a proposed intervention for this school to implement. Finally, I will reflect (with hindsight) on what changes I would make if I were to undertake this research again and areas that I feel I would like to explore in the future to add to my own 'personal knowledge'. I will also reflect on what I have learnt about the research process as a whole.

5.2 'PERSONAL KNOWLEDGE' GAINED

This section uses an ecosystemic framework to organise my understanding and interpretation of my observations and the information that I received from the learners. As stated in Chapter 4, my research essentially focuses on the school system, family system, peer system and the individual system. I have tried to be as authentic as possible in describing my reactions to and reflections on what I experienced and observed as these play a significance role in the development of my own 'personal knowledge'.

5.2.1 School system variables

This section endeavours to make sense of and interpret the findings located within the school system. Issues such as race and gender, school ethos, teacher interactions, teacher role, classroom climate and my difficulty with the programme fit are explored.

5.2.1.1 *School structure: race and gender issues*

I found myself to be very aware of the racial disparity within the school. I was concerned about the impact that this 'hidden' racism would have on the self-concept of the learners of colour within the school. The fact that the school portrays itself as a school which does not condone racism was not reflected in the social structure of the school. I found this contradiction worrisome, as it then becomes very difficult to confront and deal with, what is essentially a 'hidden curriculum' propagated (probably unconsciously) by the school. However, this may simply be an over sensitivity on my part, at this stage I do not have any 'proof' that this school structure maybe impacting on the learners of colour other than a 'gut feel'. However, I find it difficult to believe that the only two African learners in the grade did not experience additional pressures that the other learners were not exposed to. I unfortunately did not specifically target this aspect in my research, but perhaps the fact that the learners never raised this issue suggests that it is not an area of concern. It could also suggest, though, that such a situation is a socially accepted truth, a 'this is the way things are' approach that learners and teachers are not consciously aware of.

I found the gender issues even more problematic, as this was not just an objective concern of mine, but a personal one that hit home deeply. I am a feminist and I find issues of gender inequality extremely frustrating. The unequal status of female teachers in the school was very obvious, but again seemed to be one of those unconsciously accepted social 'truths' of 'this is just the way things are'. I was furious that the principal made direct reference to 'dumb blondes' in assembly, and was even more furious with myself that I did not feel empowered enough to confront him about it. Further reflection on the dynamics at play here, caused me to wonder if the 'comment' had actually been successful in what it set out to achieve (albeit unconsciously); that is to keep that 'uppity woman in her place'? That perhaps it had been an unconsciously, but powerful way of ensuring that the power still resided in the men; carried out in such a way that whether I decided to deal with it or not, I would lose. If I confronted the Principal I would be perceived as an overly sensitive teacher who despite my knowledge

base, still behaved like a women. If I did not confront him I would be left with an inner anger and sense of injustice that would be equally disempowering. I feel that it did impact on my relationship with the learners, as I had to endure the 'dumb blonde' comments and jokes for the next few days. How can you reprimand the learners for behaviour that was essentially condoned by the principal? I had to work extra hard after this to ensure classroom discipline. This caused me to reflect on whether the learners would have been more likely to implement their new skills if I had been a male teacher.

For the first time, I really began to gain a personal understanding of ecosystemic theory, and the intertwined power dynamics, and personally witnessed how the school system (and social system) was impacting on my ability to perform within the class system. As a reflective practitioner, this has made me realise that when working as an educational psychologist I need to be very aware of how the multiple systems that my clients belong to can effect an intervention that either I or they are implementing. This 'personal knowledge' has stressed the importance of empowering clients, whether they be learners, teachers or parents, to deal with issues of inequality and disempowerment. However, in order to do this I will first have to empower myself to be able to confront others on issues of inequality.

This incident caused me to consider why I felt so disempowered, and again I was confronted with a multiplicity of factors: new teacher, young, part-time, financially needy. Reflecting on my own feelings of disempowerment made me even more aware that simply implementing a generalised, isolated intervention without considering the many factors that might either enhance or derail the process did not make sense. Each situation and individual is unique, and this needs to be taken into account before, during and after the intervention.

I think it is also important to reflect on my own preconceived ideas of what this school was going to be like. My initial entry into the school was approached with trepidation. I had assumptions about privileged boys-only schools, based on previous teaching experience, that created an underlying scepticism about the authenticity of such a school in the current South African and world social situation. I had previously taught at a boys-only high school of great renown, which was also very privileged and had a large 'old boy' network. I had left that school extremely cynical and disillusioned about the value systems that were endorsed by the school. While the school's formal curriculum advocated democracy, an anti-prejudiced thinking culture and endeavoured to create future leaders and gentlemen; I found that the hidden curriculum strongly rewarded sexist, 'rugger-bugger' attitudes where white males were

seen as the elite. I had been very disillusioned by the 'facade' raised by this school, in contrast to what I felt the actual situation to be. It was with this in mind that I began teaching at the junior school and this 'baggage' could have made me overly sensitive to some of the elitist and sexist attitudes that were present. STOP! As I reread this last statement, I catch myself in the process of denying my own feelings and knowledge of the situation, and internalising the messages given to me by society – 'you're a woman, overly sensitive to criticism'. The power of the hidden message is really frightening. I am even more convinced that emancipatory researchers need to free themselves first, before they will be successful in emancipating others.

5.2.1.2 School ethos

I slowly became aware of the importance of having the principal and staff on board when implementing an intervention at a school. I received much open and vocal support from the Principal regarding the work that I was doing. The rest of the teaching staff did not seem to be interested in being involved in what I was doing with their classes. It felt as if the other teachers were saying '**you** were hired to do this, so **you** do it'. Reflecting back on this feeling I think that had I had the confidence to really promote what I was doing and emphasise the need for the other teachers to help the learners to practice the skills within the different subjects, things would have been different. In retrospect, I think that it was my own feelings of inadequacy and not being in 'my comfort zone' that prevented me from investing the necessary passion and energy into motivating a more holistic approach to the programme. Having viewed the dedication and commitment of these teachers to the learners at the school, I think that it would have been possible to involve them in the project. I have become increasingly convinced of the necessity of having all the teachers involved in a holistic intervention, my reasons for this will be discussed later.

5.2.1.3 Teacher Interactions

Continuing from the previous section, I feel that I could have made more effort to involve the other teachers in the programme. While I did detect the usual teacher 'paranoia' about having other people in their classrooms, the 'big brother is watching you' syndrome; it really was not as intense as at other schools that I have taught. I could understand their reluctance to have me involved or to share their work with me, because in essence I had been invited as an 'expert' in study and thinking skills, which may have been threatening to some of the teachers.

It may have been easier to simply 'forget' to give me class notes, rather than expose themselves to criticism on the way in which the notes were set out. Perhaps, having been brought in by the principal, they were worried that I would be reporting back to him regarding them. On the other hand, knowing that I was only going to be there for six months may have prevented them from putting energy into a programme that was essentially short-lived anyway.

5.2.1.4 Programme fit

Previously when I had taught study and thinking skills it had been for a private company and the course had taken place over two and a half days (weekends). This format had worked very well, as the learners were able to see how all the modules were interlinked. The main worry had been whether the learners were able to generalise the skills to their school subjects. Thus, I was very interested to see what would happen when a similar course was taught within the school. Unfortunately, the school had already decided to allocate me one hour a week with each class. I had serious reservations regarding this format, as I feel it is important for the learners to get a holistic overview of how the modules are interlinked. I was also concerned that the course would lose its appeal once it became part of the normal school programme. During the weekend courses I had witnessed how the learners experienced increased motivation and excitement, as they were able to discuss their difficulties with a teacher who was not part of their school. This led to a very different, but very successful teaching style of facilitation and workshopping. I was concerned that this would not be possible while I was part of the school system.

My fears were well founded. The programme lost a great deal of momentum, spontaneity, and freshness when it was spread out over two terms. There were many interruptions with classes going on excursions, school holidays and myself being sick. The course lost its intensity and was soon viewed as a free period.

It was also problematic that I was moved from class to class instead of having my own classroom. Perhaps this is simply a personal issue, that I need to have a base to work from. However, I feel that I would have been able to arrange my classroom to suit my teaching style, without the continual disruption that the hourly periods often underwent. In addition, the other teachers often left work on the board, with a 'please do not erase' message which made it very difficult to work.

What I have learnt from this research project (supplemented by previous experience) is that in order to maximise the likelihood of learners using the skills, the course needs to be high in intensity and low in duration. Rather run a three-day course (21 hours) than twenty-one weeks of one hour workshops. This three-day workshop can then be supplemented on a regular basis through the year. If such a programme is run at the beginning of the year, the learners have four months to practice these skills, with extra sessions for support, before they encounter the major exams. In addition, if the class/subject teachers are empowered with the same skills they can ensure that their teaching style and learning activities are structured in such a way that the learners are able to generalise the skills.

5.2.1.5 *Teacher's role*

With reflection on my own confusion as to where and how I fit into the school system, I have become increasingly aware of how the 'pecking order' can facilitate a teacher's entry into a new school, as you know 'where you belong' in the hierarchy. Not knowing where I fitted in was actually an uncomfortable experience for me and made me unsure about when I should be asserting myself and when I shouldn't. This may explain why I was unable to get more teachers on board the programme – I was lacking a confidence base and was therefore not pro-active enough. This same lack of confidence may have been exhibited during class as well and may be another reason why I felt that I was encountering more discipline problems with some classes.

5.2.1.6 *Classroom climate*

Despite the fact that I felt that I encountered discipline problems because of the facilitation style, rather than the more 'talk and chalk' authoritarian style that the learners were more used to; I still feel that this is the correct teaching style to use. It is important that the learners feel free to express how they really feel rather than just pretending and playing the system. This is an area of my 'personal knowledge' that I need to explore, how to widen the boundaries to allow for facilitation and mediation, yet still leave sufficient structure in place for the comfort of the learners. This I realise was my mistake. I allowed freedom of expression, without placing it in a containing framework, that would enable the learners to know what was expected of them and why they were able to behave differently in my class to other classes. In addition, my own lack of confidence and feeling of not belonging, made me revert back to old methods of teaching that I had abandoned years earlier; instead of persevering with my

current style. On reflection, I was still so caught up in my own stereotypes of a 'typical boys, top-down authority school' that I do not think I gave the learners or myself sufficient time to adapt to the different style. Instead, I gave contradicting messages by switching teaching styles as soon as I felt that I had lost control. STOP! Again on re-reading this last statement I am aware of internalising social messages. The problem was not so much my legitimate anger and frustration when working within a male hierarchy, but the fact that I was so disempowered that I was unable to embrace my own knowledge. My frustration at seeming unable to use my own style caused me to oscillate between two styles, which in turn confused the boys and made me feel even less secure. The real problem was that I did not understand the dynamics of what was happening.

This has made me very aware of how difficult emancipatory teaching and research actually is. When the social and school systems reinforce one story of teacher-learner relationships, and 'correct modes of behaviour'; it is very difficult to break out of that mould. The discomfort I felt was quickly turned into self-doubt and I would then relapse into authoritarian mode. Instead, I needed to have the confidence in my approach and persevere with it until the adjustment phase had been worked through. This is however, emotionally and physically tiring and it is difficult to obtain the distance required for reflection when you are caught up in the situation. Especially when the learners are also feeling discomfort and dealing with it by 'acting out'. It was only after I had left the school and was able to think back to what had happened that I actually had the space to conceptualise more clearly. This personal experience has left me much more aware of the difficult task teachers are set (often by educational psychologists) when they are asked to go against the flow of current procedures.

5.2.1.7 Class Identities, Within Class Factions and Liaisons

It was very interesting to see how the different classes lived up to their reputations and how this affected the classroom dynamics. The one grade 7 class was easy to teach, welcomed new ideas and had no problem with the facilitation style of teaching. The other two classes were much more difficult, and this years grade 7's were reputed to have been the worst in a long time. These two classes delighted in living up to their reputations of being difficult to teach. This definitely impacted upon the programme's success, as I was unable to allow them the freedom that the one class experienced. It was not just my different teaching method that caused the discipline difficulties (although this surely exacerbated the situation), but a group

mentality that had developed within the two 'difficult' classes. Thus, the three classes within the grade would have experienced the programme differently.

Within each class the different groups which had formed approached the programme differently, either rejecting it out of hand from the start, or eagerly awaiting the next lesson. This group identification definitely impacted on the extent to which the individuals in the class used the skills that they were introduced to. It seemed that the groups who were almost arrogantly convinced of their own cleverness and the class rebels were least likely to use the skills. This personal viewpoint needs more exploration though.

5.2.2 Family System Variables

The marginalisation of parents and family difficulties are explored within this section.

5.2.2.1 Parental Involvement

I became more aware of how parents have been disempowered and cut out of their children's education. As an educational psychologist, I am always reading how parents are the primary educators of their children. This seems to be lip service only. While at this school the parents were very involved in extra-curricular activities, there was little involvement in the academic activities. It struck me that teachers often complain that parents do not supervise their children's homework, yet parents are not shown how to do this. Teachers seem reluctant to involve parents in the academic progress of their children. This in turn, I feel, parents then opt out of their children's education to avoid feelings of disempowerment and frustration.

Although my attempts to run workshops for the parents did not materialise I still feel that this is an area that needs further exploration. If we are to work holistically, surely it makes sense to empower the parents to support the children through school. It is unfortunate (but perhaps not surprising) that I was not able to extend my research into this area.

5.2.2.2 Family Problems

Family problems definitely seem to impact on learners, creating emotional consequences that lead to acting out in class. It seems unlikely that learners experiencing emotional turmoil would be ready to adopt new styles of learning. This was definitely the case with a few of the boys. They were so caught up in their own issues and finding ways to make themselves feel better that they were not prepared to expend mental energy in other areas. This suggests that

study and thinking skills programmes need to be designed in such a way that family problems can be identified and referred for further intervention.

5.2.3 Peer System Variables

The complexity of 'expected' and alternative peer identities are explored.

5.2.3.1 Expected Peer Identities and Alternative Peer Identities

The literature seems to suggest that learners who experience failure turn to alternative peer groups to experience success. At this school, this was not so neatly stereotyped. Many of the learners who had 'rebel' identities were achieving well academically and on the sports field. Similarly, many of the 'weaker' learners had 'expected identities' in that they were role models in class, always paying attention and asking the correct questions.

The whole idea of alternative peer groups seems to be much more complex than replacing school success with a form of social success. What was clear, though, is that in the long run, it is likely that identification with an alternative peer group would lead to academic underachievement. Within the study and thinking skills programme, it became very obvious that the learners who did identify with alternative peer groups gained the least from the programme, quite simply because they were not paying attention and were generally doing something else.

The fact that most of the boys reported having good relationships and that there seemed to be an emphasis on the quality of the relationship suggests that on the whole there was a positive sense of peer identity.

5.2.4 Individual Variables

This section explores the individual variables of self-concept and school identification.

5.2.4.1 Self Concept

There has been much literature written about the relationship between self-concept and academic achievement. This study has made me very aware of the extent to which learners seem to internalise labels given to them by significant others. The vocabulary used by many of the learners indicated a much greater likelihood that many of the negative labels were from an external, adult source rather than self-given. While I was aware that learners do this, it

never really 'sunk in' until I started reading what some of the learners think about themselves. The one that truly left me with a lump in my throat was the one who wrote that he thought he was 'a nuisance, very selfish, sulky and fussy'. Even the learner who wrote that he was 'well-mannered and behaved' sent warning bells clamouring in my head.

This has great implications for the implementation of study and thinking skills programmes. Firstly, it suggests to me that such programmes may be unsuccessful with many learners until their self-concept and self-efficacy have improved (and this refers to all aspects of self-concept not just academic). Secondly, therefore, perhaps study and thinking skills programmes need to incorporate screening for low self-concept to allow for further intervention (referral if necessary) at the individual, family or school level. Thirdly, even a good academic self-concept may prevent learners from using the skills as they feel that their own methods work fine (which they probably do at Grade 7). The implications of this for me are that a study and thinking skills programme needs to be more continuous and more holistic in design than is usually the case. A once off programme with no follow up support and no room for further intervention in other systems is not likely to work for the majority of learners.

5.2.4.2 *School Identification*

One aspect of this research that I found fascinating was the overwhelmingly positive identification of the learners with their school. Having taught at ten schools, this is the first time that I have ever witnessed this. Even at primary school, learners are griping about their school from at least Grade 6. With this kind of response from the learners, if the study and thinking skills programme could be adopted by the whole school (all teachers fully incorporating the skills within their subjects) and become part of 'this school's way of doing things', then I think it is very likely that the learners will start adding to their repertoire of skills.

5.2.5 *Learners' views on the programme*

5.2.5.1 *Learner Comments On and Ratings Of Modules*

It was interesting for me to see which modules were the least favoured by the learners and their reasons for this. The mindmapping, thinking skills and memory skills were seen as creative, fun and easy by the learners; whereas the Muscle reading (which is a way of reading

for understanding) and Column method notes (which is a way of organising summaries) were the least liked as they were boring, time consuming and hard work. Essentially, the backbone skills of learning, the actual learning process, were the most disfavoured; but the extra skills to maximise the use and retention of the skills were the favourite.

This is problematic for me as it suggests that the learners did not truly understand why they were supposed to use all the different modules. Recent research is emphasising teaching the 'why' as well as the 'how' and I think that this is an aspect that was not fully dealt with in my programme. I also feel that when a programme like this is spread over so many weeks, it becomes increasingly difficult for the learners to understand the inter-relationship between the different skills. What this suggests to me is that, once again, study and thinking skills programmes need to be short but intense, to allow the learners to gain a holistic understanding of how the skills are inter-related; and that the programme needs to explicitly explain (in age-appropriate terminology) why the different skills are used.

The comments that certain modules are boring and hard work raise other concerns for me as well. These comments are often raised by learners about schoolwork in general, particularly learning for exams. This causes me to reflect on whether the education system itself has failed to change sufficiently to meet the different needs of the modern learner, or whether modern society is resulting in learners with short concentration spans and a great need for visual stimulation; or a combination of both (which is the one I favour). If it is the latter, a combination of an out-of-date education system and learners who are used to intense visual (and auditory) stimulation; then study and thinking skills programmes are just a stopgap until the education system can be revised. Would time then be better spent on curriculum re-design rather than ad-hoc programmes? Or would a truly holistic, whole-school approach to study and thinking skills, a true paradigm shift in the way in which we teach, be the start of curriculum re-design?

5.2.5.2 Contrast Between Learners Comments and Implementation

Again it was interesting that although the learners rated the programme as fairly to very useful, on the whole, the pre- and post-intervention comparison revealed no significant change in habits and self-concept. One of the reasons for this is that the school control tests were held at the beginning of the second term, before the programme was completed. It is possible therefore that many of the learners did not use their very new, untried skills for those

control tests. It maybe, that by the end of the year, the learners were using more of the skills. Another possibility is that the learners did not really find the programme useful, but did not wish to hurt my feelings and so changed their written responses. Finally, it maybe, that with the exception of the self-concept questions (Burden, 2000) the questions designed by myself, with the negative-phrasing of many of the questions created confusion and thus the pre- and post-intervention analysis is seriously flawed. This contradiction however emphasises the need for a thorough investigation of the extent to which learners actually adopt the skills they are taught, and the extent to which the skills actually improve their academic competence. Thus there is no point introducing a programme of this nature, unless it is monitored to ensure that it is of benefit.

5.3 REFLECTING ON THE RESEARCH PROBLEM

In the previous sections of this chapter, I have reflected on the 'personal knowledge' that I gained through this research. In this section I will attempt to draw on this knowledge to briefly answer the question that I posed at the start of this research assignment, which was:

How do the learners' ecosystems interact and impact on the acquisition and generalisation of study and thinking skills; and to what extent is this situation affected by unequal power relationships between and within the ecosystems?

This research problem was then broken down into more specific questions, that I will use to frame my response to the above problem. As my 'personal knowledge' has been detailed elsewhere in this section, my thoughts on the specific questions below will be brief in order to avoid too much repetition.

- **What factors within the learners' ecosystems impact on the development of study and thinking skills?**

The answer to this question seems, quite simply, to be ALL the systems to which the learner belongs. Each learners situation is different, and the systems will interact in different ways to create a unique and complex situation. Thus, any cognitive skills intervention will require a multi-pronged, holistic approach, rather than an ad hoc, piecemeal one. The benefit of this is that not only the learners will be empowered, but also the parents and the teachers.

- **Are the teachers prepared to become involved in facilitating the development of these skills?**

This is an interesting question and the answer will change from school to school. In this case, the teachers were never officially consulted by the principal, as to whether or not they would like to be involved in the programme and be shown how to incorporate study and thinking strategies within their teaching. It was left up to the teachers to decide if they would like to see what was being taught to their classes. My feeling is that the teachers did not view the programme as having anything to do with them, that this was why I had been employed, so it was my job. If the importance of embracing a whole school approach to cognitive skills is explained to the teachers, their response may be different. However, teachers are already feeling overwhelmed by outcomes-based and inclusive education. It is important, therefore, that study skills, thinking skills and other cognitive skills, should be introduced as a way of coping with the changing education system, rather than adding to the difficulties already experienced by teachers. This is an area that should be further explored.

- **Are schools prepared to instigate collaborative processes with parents to further the development of the learners – necessitating a move away from the role of sole 'expert' to 'joint expertise'?**

At this stage, it seems that there is a very clear distinction between what parents are encouraged to become involved in, that is, administration and extracurricular activities, and what they are not, that is, academic involvement. However, once again, the Principal and teachers were not introduced to the idea of empowering parents. It is possible that if the reasons for involving parents were shown to the Principal and teachers, then they would be more likely to embrace the idea. My experience with being more democratic in class, and the resulting discomfort that I encountered, suggests to me that some teachers will not enjoy the redefining of roles that will occur if parents are empowered. The more parents learn about the learning process, the more they will be in a position to criticise current practices in education. Thus, empowering parents may be viewed as very risky by some teachers. In addition, my experiences in class have made me realise that such a renegotiation of roles requires a very clear framework, that provides containment for both teachers and parents, and provides the necessary forums for discussion. Again I think this is an area that needs further research.

- **What problems will be encountered in ensuring participatory action research within the school environment?**

The basic problem that I encountered was myself. I was not fully cognisant of the time that needed to be spent negotiating processes and access beforehand. I assumed that I would get the access and participation that I required as the research progressed. This was not to be the case. Of course, I was still playing the role of 'expert' researcher although I was trying to be democratic and participatory. Initially, I did not have a clear understanding of all the aspects this process emancipatory and participatory action research would entail. My 'objective knowledge' at this stage needed to be owned and my research process was similar to driving a car by reading the manual. I knew what was supposed to be happening but I did not have the skill to transform the knowledge into action. With hindsight, I feel that it is very important to lay the groundwork more thoroughly first so that the participation flows naturally, with everyone being aware of their roles within the research process and having an understanding of how their participation gives them ownership of the research, so that it is a shared experience.

- **How realistic is emancipatory research within the current school climate?**

This was essentially the first time that I really reflected on the impact of unequal power relationships on peoples' lives. It made me realise that emancipatory action research has a great role to play in our society. After this experience and my reflections on it, I have realised that you cannot study any context without acknowledging and investigating all of the unequal power relationships within the context.

Interestingly, at the outset of this research, I had not considered myself in the light of the disempowered and I was forced to reassess my position. I realised that unequal power relationships are incredibly complex and subtle. I was both empowered as a result of my qualifications and expert status, and my authority over the boys; and disempowered by my gender and social stereotypes. The subtlety of these power dynamics, and the fact that most people are not consciously aware that they exist, make them exceedingly difficult to confront, which leads to a great deal of frustration and anger that has no where to go.

This led me to reconsider the angry statements about teachers, and vice versa, that are made by learners and parents. This disempowerment of learners and parents needs to be addressed. I do not think our education system is not going to be successful until parents and learners see

themselves as part of the education process, and work with it instead of against it. I view this disempowerment and resulting anger as a huge, inflamed, pus-filled boil that is slowly but surely infecting the whole system. If the boil is not lanced and healed, if the system does not put effort into healing itself then the system will continue to deteriorate.

Emancipatory action research is very necessary in South Africa. I agree with Davidoff (1993) that it is more important to start the process of emancipatory action research than be rendered motionless by the need to meet all its theoretical requirements. For me, emancipation is a journey that may be lifelong, it is not something that happens immediately. Being overly concerned that you have met all the parameters of emancipatory action research is not emancipatory and smacks more of a positivist viewpoint. The point is, that by beginning your own journey of emancipation and by being a reflective practitioner, you are in a position to help others begin the same journey. There is a difference between the 'objective knowledge' of research methodology textbooks and the realities of putting them into practice in the field. Yes, then I do believe that it is possible, realistic and necessary to begin emancipatory action research in South Africa; it is a process, a destination that we need to work towards. I thank Davidoff (1993) and McNiff (1993) for helping me to realise this.

5.4 IMPLICATIONS OF STUDY

South Africa's changing educational philosophy, that is, its move to a democratic, inclusive, outcomes-based approach, necessitates a change from the way South African schools have been traditionally organised. We need to move away from top-down management, that is dependent on the principal for every move made in the school, to a system in which each individual takes responsibility for their own self-growth and that of the learners in their classes, and contributes to the good of the school through teamwork. The exponential growth of information in this, the Information Age, requires a change from content-based to skills-based education, where instead of learning vast reams of information, learners need to learn to sort, filter, manage and use information. The implementation of Curriculum 2005, has necessitated that schools move to skills-based learning, yet this seems to be happening in a sporadic way, where many teachers are still thinking and doing traditional content-based teaching, while throwing in the occasional activity to pay lip-service to Curriculum 2005 (at least this was the case in the school of this study).

I agree with Burden (1997) that using a combination of independent and integrated approaches has the most chance of success. I feel that the teaching of cognitive strategies as a separate subject (De Bono, 1991; Link, 1991) is important as it enables the learners to clearly understand the skills involved, without them being masked by content. My personal experience suggests that this should take place in an intensive course of short duration (2 or 3 days) that provides the learners with a clear understanding of the difference between meta-cognitive and cognitive study and thinking strategies. The short duration of the course should aim at creating an excitement about these strategies that motivates the learners to use them. This can then be followed by sessions that expand on the skills and strategies already introduced.

It is vitally important, that the skills then become contextualised by being integrated with core subjects (De la Garanderie, 1991; OECD, 1991; Voutilainen, 1991), as this then maximises the learners ability to internalise and then generalise the skills. This, then, necessitates that teachers also master the skills and strategies so that they are able to show the learners how to use them within the different subjects, and within life situations.

This study has convinced me that Haywood's (1997) findings, which were discussed in section 2.5.3, have much to offer the development of skills-based or cognitive learning in South Africa. Firstly, there needs to be a philosophical shift in the thinking of the administrators (and I would include the teaching staff in this). In other words, the importance of skills-based or cognitive learning needs to be a philosophical stance that is embraced by the whole school, not simply a programme that is implemented by the Principal. There needs to be a *"system-wide commitment to cognitive approaches at all levels"* (Haywood, 1997:8). Skills-based learning needs to be undertaken by teachers who are well trained in the 'how' and 'why' and who understand the nature of cognitive education. Such education cannot take place in isolation, although specific lessons can be reserved for the teaching of specific skills and strategies, rather these need to be incorporated into as many lessons and subjects as possible. Cognitive education must become a culture and not a subject. The commitment to cognitive learning needs to be alive and growing, which entails continuous evaluation and realistic changes. It should not become yet another dead, restricting system. This type of learning requires a mediation and facilitation style of teaching, which is flexible and can be used across the system.

In addition to these points raised by Haywood (1997), I would also advocate that parents, extended families and/or communities be involved in the process. I do not feel that we can continue to disempower parents by excluding them from the academic process. Schools can run workshops for parents that will enable them to understand the learning process that their children are undergoing; that empowers them to support their children emotionally and academically; and enables them to facilitate the development of meta-cognitive and cognitive strategies in their children. In this way, parents can be taught how to help improve the self-concept of their children, and to recognise early warning signs that may indicate that alternative forms of support may be necessary. It is also possible that guidance teachers or class teachers could screen learners for low self-concept, and individual or family difficulties that may not be addressed by the family. I feel that we cannot restrict our attention to the school system alone.

5.5 FUTURE ACTIONS

Many studies of the whole-school approach have been undertaken abroad (outlined in the previous section) that have illustrated the success of creating a learning culture that permeates the whole school and secures professional commitment. At this stage in South Africa, research of a similar nature is limited. For me, it would make sense to find a school that is willing to make this type of commitment, and to monitor how well it works in South Africa. It seems to me that such an approach has the potential to mitigate a myriad of difficulties that the South African education system is undergoing. From the perspective of implementing a study and thinking skills programme within a school, I would like to research the whole school approach.

From a research perspective it would dovetail nicely with the insights that I have gained from my own research process. Firstly, from an action research perspective, this would be the next logical step in my research spiral. As a teacher-researcher I would continue to build up my own 'personal knowledge' to be shared and debated with other colleagues. From an emancipatory and participatory action research perspective, the whole school approach would truly allow for all parties to be involved in the research process, and it would be emancipatory, with a strong focus being the empowerment of learners, parents and teachers.

5.6 CONCLUDING REFLECTIONS

This study has explored the ecosystemic variables, and unequal power relationships that may impact on the implementation of a study and thinking skills programme. I now realise that intervening systemically means that I need to address the power dynamics at play, otherwise these can derail the intervention process. In addition, I need to try and involve as many of the systems as possible in the intervention, preferably using a whole school approach which necessitates a philosophical commitment to the process by all stakeholders (including parents).

This study has attempted to show my internalisation 'objective knowledge' through this research process and the development of my own 'personal knowledge' and self-understanding in relation to both study and thinking skills programmes, and the process of research.

Finally, this study has contributed to my development as an educational psychologist and a reflective practitioner. I now know how complex ecosystemic interactions are, and realise that simple, single-system interventions unlikely to be as effective as multi-pronged interventions. I feel that I have developed some of the skills necessary to enable other people to begin their own journey of emancipation and I intend to continue with my own development in this area.

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APPENDIX A: THE STUDY AND THINKING SKILLS MODULES

MEMORY TECHNIQUES

Most memory techniques use processes of visualisation or/and association. Association is a process where a keyword is associated with an easier word to remember. The associated word can either sound like (bell for Belgium) or remind you of (pizza for Italy) the keyword. Visualisation is a process in which pictures are used to aid the memory. These pictures must combine as many of the senses as possible (sight, sound, touch, taste, smell) and can include feelings (humour, fear, revulsion).

Memory techniques can be combined with each other or used on their own. Each person will develop their own style of using memory techniques that will depend on their own personality and preferences.

Memory techniques should not be used to replace Muscle Reading, but rather to aid in the recall of the summarised information.

Chain Method: Keywords/images are placed in chains.

Number Shape: Number Pictures are used to anchor keyword associations in the correct order (1 = lamppost).

Alphabet: Alphabet pictures form the same function as above.

Loci: Parts of the body, room or house are used to anchor images

New sentences: The first letters of keywords are used to create sentences: Every Good Boy Deserves Fudge (E, G, B, D, F)

New Words: Roy G. Biv (Red Orange, Yellow, Green, Blue, Indigo, Violet)

Rhymes and songs: Thirty days hath September ...

MUSCLE READING

The key idea behind Muscle Reading is that your textbooks have something that you want. They offer knowledge and valuable information. Sometimes though, the value is buried so deeply that extracting it requires skill and energy.

Most students try to extract information by using a bottom-up technique that starts with the detailed information. This is a very difficult way to understand information. A better technique is Top Down studying. This concentrates on understanding key concepts, ideas or issues first, then adding the details. For example, the human body rests on the skeletal frame, without this supporting the body, the extra details (muscles, arteries, nerves, etc.) have nothing to be attached to. When you read a text, the idea is to gain an understanding of the 'bare bones' and then add in the rest of the information.

Muscle Reading is a three-phase technique that you can use to do this.

PHASE 1: Pry Out Questions**1. Preview**

Keep the Preview short.

Look at the contents page.

Look at the titles and headings.

Read the introductions, conclusions and summaries.

Examine pictures and diagrams.

2. Outline

Form an outline of the information being studied, either in your head or (preferably) roughly on a piece of paper (concept mapping). This helps you to organise your thoughts about the text. Remember, DO NOT include details in your concept map.

3. Question

Ask yourself what you know.

Ask yourself what you do not know.

Ask yourself what you need to find out.

This helps to focus your reading and helps you to extract key information. If you change each heading into a question, it will help you to separate essential information from waffle.

PHASE 2: Root Up Answers**4. Read**

Read intensively and actively.

Be conscious of what you are doing.

Interact with the information.

Avoid marathon sessions. Schedule breaks and set a reasonable goal for the entire session.

For difficult reading e.g. Science and Maths, set shorter goals.

5. Underline

Deface your books – But only if it belongs to you.

Underline or highlight the text – Remember no more than 10%. Or use one colour for the main idea per paragraph and a second colour for essential details.

Paragraphs should focus on one main concept with supporting detail. Some paragraphs may be linked together, you will have to decide if the information should be placed under one main idea or two.

Write comments next to the text – keywords, questions, comments etc.

Make final mind-maps / concept maps

Make detail notes

6. Answer

As you read make sure that you find the answers to your 'I don't know' questions.

If you don't find the answers, make a brief note to ask the teacher.

PHASE 3: Recite, review and review again,**7. Recite**

Talk to yourself (make sure no one is looking) about what you have learnt. Explain as much as you can about each underlined point.

8. Review 1

Plan to do your first review within 24 hours of reading. A review within 24 hours moves the information from your short-term memory into your long term memory. This review can be short. You might spend as little as 15 min reviewing a 2 hour reading assignment.

During this review look over your notes and clear up anything that you don't understand. Recite some of the main points.

At first you may be discouraged by how much you seem to forget. Don't worry – notice how much quicker you pick up the material the second time round. One of the characteristics of memory is that even when you cannot recall something immediately you can relearn it easier if you have already learnt it once.

9. Review 2

The final step is the monthly or section review. This is very short – perhaps only four or five minutes per section. Read the highlighted parts of your text. Recite one or two of the more complicated points.

MAKING NOTES

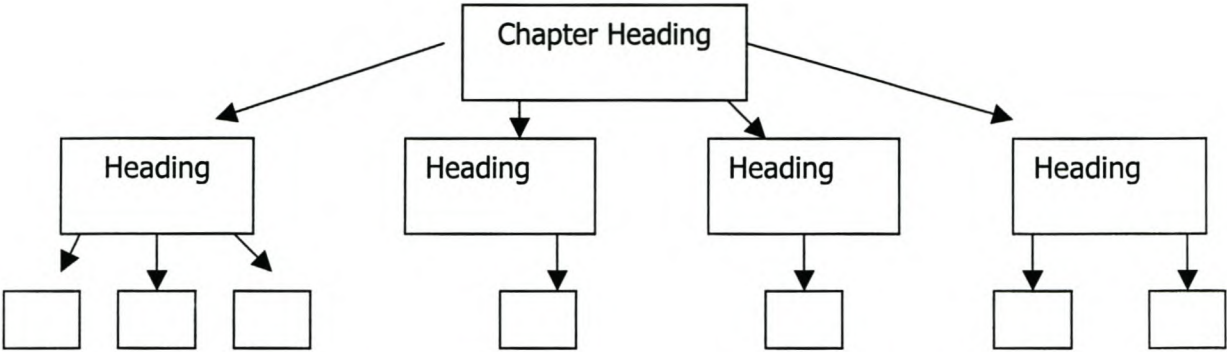
Different techniques can be used to make notes, 3 of the more effective ways are concept mapping, mind mapping and detail notes. It is important to remember when making notes that the author of your textbooks has usually received a small fortune to write them. You, on the other hand, will not receive any money for rewriting the textbooks. Your learning notes should only contain keywords or at the most short phrases. Rewriting sentences and paragraphs from your textbooks is a waste of time and effort. It is the process of selecting keywords that enables you to understand and remember key concepts.

Concept Mapping and Mind Mapping

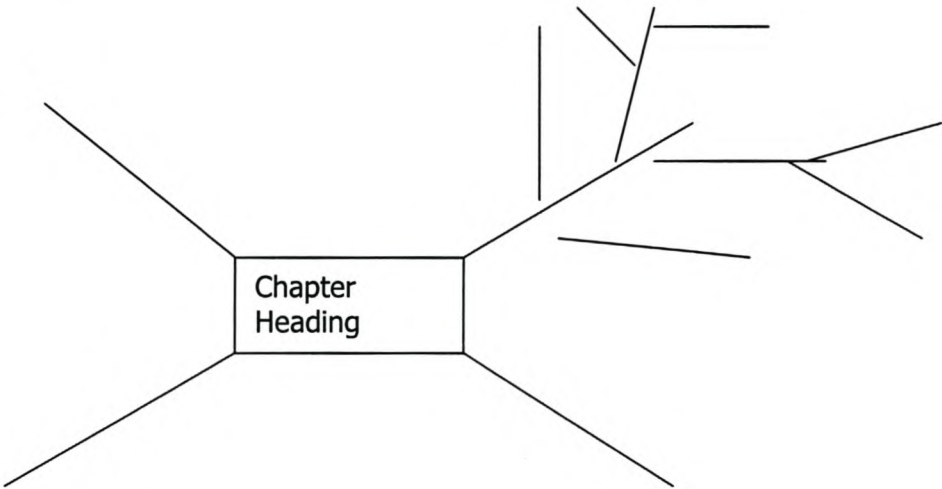
Concept mapping and mind mapping are very similar. Both processes enable the students to outline the major concepts and ideas contained within the text. They also enable the students to see relationships between concepts, similarities and differences, and exceptions.

Both maps work from central concepts to main ideas - do not include details. Use keywords only! Do not write in sentences. If you are worried that you will forget the information, you can write down the page number of your textbook for future reference. Both types of maps use colour. Neither map is restricted to these basic shapes. The idea is for you to create a map that illustrates the central concepts of the chapter.

Concept maps usually begin with the main idea at the top of the page. Each concept/heading is then broken down into its subsequent subconcepts/subheadings clearly indicating the relationship of ideas.



Mind maps are very similar but are more free-flowing. They usually begin from a central point and expand outwards. Mind maps are often used when brainstorming for assignments an concept maps for illustrating the relationship of ideas. However both may be used for learning, depending on YOUR preference.



Column Method

This is a good way to record details. Usually the main idea of each paragraph is situated in the Main Idea Column and the supporting information is placed in the detail column. However, this depends on the type of information being studied. Students may change the columns to suit their need, for example having columns for subheadings, main ideas and details.

Subheading			
Image	Main Idea	Details	Extra Info

Remember: DO NOT simply rewrite your notes from the textbook. The author was paid a lot of money to write the book, YOU won't be paid to rewrite it. The learning process occurs when you try to understand the text by selecting the important information, not by rewriting it.

THINKING TOOLS

CAF (Consider All Factors)

Purpose of the tool is to look at all the factors involved. People naturally assume that they have considered all the factors, but often their consideration is limited to the obvious ones. Using CAF forces you to look around for all the factors. When using this tool, focus can be narrowed to:

- Factors affecting oneself
- Factors affecting other people
- Factors affecting society in general

The key question to ask is 'What factors have been left out'. The intention is to be as complete as possible and to consider all factors rather than looking at them in terms of favourable or unfavourable factors.

PMI (Plus, Minus, Interesting)

Instead of deciding whether or not you like an idea, PMI enables you to broaden your thinking to include interesting ideas about the idea as well. The interesting points are neither good nor bad, but are worth considering and may suggest new approaches to the idea.

The natural reaction to an idea is to like or dislike it, approve or disapprove of it. If you like an idea it is unnatural to look for the negative aspects, and vice versa. Using PMI provides the opportunity to bypass the natural emotional reaction to an idea. The PMI operation enlarges the view of a situation, which would be narrowed by emotional reactions.

C&S (Consequences and Sequels)

C&S is the crystallisation of the process of looking ahead to see the consequences of an action, plan or decision. C&S deals with what may happen after the decision has been made. Consequences are categorised into four types:

1. Immediate (now)
2. Short term (1-5 years)
3. Medium term (5 – 25 years)
4. Long Term (over 25 years)

NB: It is important to know whether the consequences are reversible or not.

AGO (Aims, Goals, Objectives)

In some situations, it is more appropriate to speak of aims, in others of goals and in yet others of objectives. The point of AGO is to introduce and emphasise the idea of purpose. No attempt should be made to bring out the philosophical differences between the three words since this will only sidetrack the issue. The following are broad definitions of the three words:

- Aim: The general direction
- Goals: The ultimate direction
- Objective: A recognisable point of achievement along the way.

Understanding purpose broadens perception, since it is a deliberate focus of the intention behind the actions. Being able to define objectives assists in thinking areas such as decision making, planning and purposeful action.

FIP (First Important Priorities)

FIP is a contraction tool. It is a tool for organising ideas, factors, objectives and consequences, so that their relative importance may be noted. FIP is used after other tools such as PMI, CAF, and C&S have been used to generate options. FIP is a subjective judgement situation and there are no absolute answers. The intention of this tool is to focus attention directly onto the assessment of importance of items. Generate as many options as possible before picking out priorities. You should know exactly why you have chosen something as a priority. If it is difficult to choose the most important item, drop out the least important and see what you are left with.

APC (Alternatives, Possibilities, Choices)

APC is an antidote to emotional reaction. It asks the question 'What else might have happened here?' or 'What else can I do?' APC is used to deliberately find alternatives, especially those that are beyond the obvious choices. It is a deliberate tool which takes us beyond our natural explanations and choices in a situation. Examine all alternatives, not only obvious ones and do not be satisfied until you have an alternative that you feel is appropriate. Remember that to look for alternatives when you are not satisfied is easy, but to look for them when you are satisfied requires a deliberate effort.

OPV (Other People's Viewpoints)

OPV is a tool, which enables us to escape from our own point of view and to take the views of others into consideration. By doing this, our view is broadened and situations may be looked at in new ways. This tool is an antidote to self-centredness because it enables us to see that another person may have different objectives, priorities, and alternatives to ours. Even if you disagree with another person's viewpoint you should still be able to see it. Consider the consequences of insisting on your own viewpoint and be able to articulate the differences and similarities between viewpoints (we tend to focus only on the differences).

PLANNING

Planning is thinking ahead to see how you are going to accomplish something. In a plan you set up a program of what you want to achieve. The more complex your goal, the more necessary it is to have a clearly thought out plan.

1. Collect all your background information before making your plan
2. Know what you want to achieve AGO
3. Plan to have a contingency plan APC
4. Consider the consequences of your plan C&S
5. Keep the plan simple and direct

DECISIONS

The purpose of this tool is to enlarge one's view of the situation, so that one has a broader view when dealing with it. The DECISIONS tool brings together a number of other tools: FIP, AGO, CAF, C&S, PMI & OPV. You should always be able to tell yourself the reason behind any decision you made.

CONSOLIDATE

The purpose of consolidating is to strengthen our understanding of a situation by deliberately pausing to check how much we have achieved and how much we still have to achieve. To consolidate is to make a summary of the core of what has been achieved or covered up to that point. There are two key questions for using this tool:

1. What have I actually achieved?
2. What do I still need to achieve?

Asking these questions reveal how thorough one's thinking is about a situation, or if it is deficient in any area.

APPENDIX B: TEACHER QUESTIONNAIRE

Study and Thinking Skills Programme (2001)

Dear Colleagues

This letter is intended to briefly inform you of the aim of the Study and Thinking Skills Programme for Grades 4 - 7 and to assess which skills you feel need to be initially targeted in the different grades.



The aim of the programme is to enable the pupils to become actively involved in their studies by equipping them with metacognitive, cognitive and affective skills. It is important that the pupils are able to generalise these skills from isolated practice activities to their core subjects. An effective way of achieving this is to have the students practice the new skills on content that they are currently working on in class. For this reason I would very much appreciate it if I could be provided with a copy of any content areas that you feel could be used for practice material.

I am very keen to liaise directly with class teachers if your class has any specific needs with which I may be able to assist, or if you have any constructive criticism to offer. The idea is that the programme be an integral part of the pupils learning experience and development rather than an isolated module.

Before implementing any new programme it is advisable to do a needs analysis. I am very aware that you are busy, but any feedback that you can provide me with will be greatly appreciated. I have listed over the page the study and thinking skills that are usually taught in study skills programmes. If you have the time, please can you simply mark which skills you feel need to be covered and if you feel that any are of particular importance simply place an exclamation mark next to them. Place the list in my pigeon hole when you are finished. Please feel free to make any suggestions or add to my list in the space provided.

Many thanks for your help

Sharon Aitken

Name: _____

Class: _____

Skills List	
Study Skills	
	Motivation
	Overcoming Procrastination
	Listening Skills
	Reading speed / processing techniques
	Understanding a passage / chapter
	Summarising (keywords and main ideas)
	Note making (mind maps and details)
	Memory techniques
	Communicating ideas: oral & written
	Time Management
	Writing tests and exams
Thinking skills <i>(simplified for developmental level)</i>	
	Creative thinking
	Lateral thinking (CAF, PNI, OPV, C&S etc.)
	Critical thinking (analysis, synthesis)
	Basic thinking (categorising, linking concepts, predicting)

Further comments/queries that you may have are very welcome:

APPENDIX C: LEARNER QUESTIONNAIRE 1

Study Habits Information

Dear Learner

This questionnaire has been designed to find your strengths and weaknesses when studying. With the information that you provide me I will be able to help you with your learning. Please try to answer all the questions as accurately as possible. Take as much time as you need. All information in this questionnaire is confidential

Part One

Please rate yourself on the following questions, using this scale:

- a = Never
- b = Occasionally
- c = Half of the time
- d = Nearly always
- e = Always

Classroom Habits

- | | | | | | |
|---|---|---|---|---|---|
| 1. I have a positive attitude in class | a | b | c | d | e |
| 2. I like my teachers | a | b | c | d | e |
| 3. I enjoy my subjects | a | b | c | d | e |
| 4. I am easily distracted in class | a | b | c | d | e |
| 5. I distract other people | a | b | c | d | e |
| 6. I find myself day dreaming in class | a | b | c | d | e |
| 7. I listen carefully to the teacher | a | b | c | d | e |
| 8. I have difficulty understanding the teacher? | a | b | c | d | e |
| 9. I ask questions in class | a | b | c | d | e |
| 10. I take notes in class | a | b | c | d | e |
| 11. I think that my teachers like me | a | b | c | d | e |

Study Habits

- | | | | | | |
|---|---|---|---|---|---|
| 1. I use a system for studying material | a | b | c | d | e |
| 2. When reading I ask myself questions | a | b | c | d | e |
| 3. I can summarise the main ideas in my notes | a | b | c | d | e |
| 4. I use a system for making notes | a | b | c | d | e |
| 5. I use mind maps | a | b | c | d | e |
| 6. I learn information by saying it over and over | a | b | c | d | e |
| 7. In tests I forget the facts | a | b | c | d | e |

- | | | | | | |
|---|---|---|---|---|---|
| 8. I have ways to remember facts | a | b | c | d | e |
| 9. I talk through my notes when learning | a | b | c | d | e |
| 10. I like to use or see diagrams when learning | a | b | c | d | e |
| 11. I like to practice my work when learning | a | b | c | d | e |

Personal Habits

- | | | | | | |
|---|---|---|---|---|---|
| 1. I find it difficult to start working | a | b | c | d | e |
| 2. There are subjects that I don't work for | a | b | c | d | e |
| 3. I have difficulty sitting still when I'm working | a | b | c | d | e |
| 4. I forget what I have read | a | b | c | d | e |
| 5. I listen to music while I work | a | b | c | d | e |
| 6. I am interrupted when working | a | b | c | d | e |
| 7. I feel that there is no point to studying | a | b | c | d | e |
| 8. I try hard but still get disappointing results | a | b | c | d | e |
| 9. I become very frustrated when studying | a | b | c | d | e |
| 10. I find studying boring | a | b | c | d | e |

How I see myself

- | | | | | | |
|--|---|---|---|---|---|
| 1. I'm good at doing tests. | a | b | c | d | e |
| 2. I like having problems to solve. | a | b | c | d | e |
| 3. When I am given new work to do, I usually
feel confident I can do it. | a | b | c | d | e |
| 4. Thinking carefully about your work helps you
to do it better. | a | b | c | d | e |
| 5. I'm good at discussing things. | a | b | c | d | e |
| 6. I need lots of help with my work. | a | b | c | d | e |
| 7. I like having difficult work to do. | a | b | c | d | e |
| 8. I get anxious when I have to do new work. | a | b | c | d | e |
| 9. I think that problem-solving is fun. | a | b | c | d | e |
| 10. When I get stuck with my work I can usually
work out what to do next. | a | b | c | d | e |
| 11. Learning is easy. | a | b | c | d | e |
| 12. I'm not very good at solving problems. | a | b | c | d | e |

13. I know the meaning of lots of words.	a	b	c	d	e
14. I usually think carefully about what I've got to do.	a	b	c	d	e
15. I know how to solve the problems that I meet.	a	b	c	d	e
16. I find a lot of schoolwork difficult.	a	b	c	d	e
17. I'm clever.	a	b	c	d	e
18. I know how to be a good learner.	a	b	c	d	e
19. I like using my brain.	a	b	c	d	e
20. Learning is difficult.	a	b	c	d	e

Part Two

Please write comments on the following topics in the space provided. This information will be kept confidential.

I think I am

I am good at

I am bad at

My teachers are

My subjects are

My school is

My friends are

My family is

You should know that I

Thank you very much for your help

APPENDIX D: LEARNER QUESTIONNAIRE 2

Study Habits Information

Dear Learner

This questionnaire has been designed to find your strengths and weaknesses when studying. With the information that you provide me I will be able to help you with your learning. Please try to answer all the questions as accurately as possible. Take as much time as you need. All information in this questionnaire is confidential

Part One

Please rate yourself on the following questions, using this scale:

- a = Never
- b = Occasionally
- c = Half of the time
- d = Nearly always
- e = Always

Classroom Habits

12. I have a positive attitude in class	a	b	c	d	e
13. I like my teachers	a	b	c	d	e
14. I enjoy my subjects	a	b	c	d	e
15. I am easily distracted in class	a	b	c	d	e
16. I distract other people	a	b	c	d	e
17. I find myself day dreaming in class	a	b	c	d	e
18. I listen carefully to the teacher	a	b	c	d	e
19. I have difficulty understanding the teacher?	a	b	c	d	e
20. I ask questions in class	a	b	c	d	e
21. I take notes in class	a	b	c	d	e
22. I think that my teachers like me	a	b	c	d	e

Study Habits

12. I use a system for studying material	a	b	c	d	e
13. When reading I ask myself questions	a	b	c	d	e
14. I can summarise the main ideas in my notes	a	b	c	d	e
15. I use a system for making notes	a	b	c	d	e
16. I use mind maps	a	b	c	d	e

17. I learn information by saying it over and over	a	b	c	d	e
18. In tests I forget the facts	a	b	c	d	e
19. I have ways to remember facts	a	b	c	d	e
20. I talk through my notes when learning	a	b	c	d	e
21. I like to use or see diagrams when learning	a	b	c	d	e
22. I like to practice my work when learning	a	b	c	d	e

Personal Habits

11. I find it difficult to start working	a	b	c	d	e
12. There are subjects that I don't work for	a	b	c	d	e
13. I have difficulty sitting still when I'm working	a	b	c	d	e
14. I forget what I have read	a	b	c	d	e
15. I listen to music while I work	a	b	c	d	e
16. I am interrupted when working	a	b	c	d	e
17. I feel that there is no point to studying	a	b	c	d	e
18. I try hard but still get disappointing results	a	b	c	d	e
19. I become very frustrated when studying	a	b	c	d	e
20. I find studying boring	a	b	c	d	e

How I see myself

21. I'm good at doing tests.	a	b	c	d	e
22. I like having problems to solve.	a	b	c	d	e
23. When I am given new work to do, I usually feel confident I can do it.	a	b	c	d	e
24. Thinking carefully about your work helps you to do it better.	a	b	c	d	e
25. I'm good at discussing things.	a	b	c	d	e
26. I need lots of help with my work.	a	b	c	d	e
27. I like having difficult work to do.	a	b	c	d	e
28. I get anxious when I have to do new work.	a	b	c	d	e
29. I think that problem-solving is fun.	a	b	c	d	e
30. When I get stuck with my work I can usually work out what to do next.	a	b	c	d	e
31. Learning is easy.	a	b	c	d	e

32. I'm not very good at solving problems.	a	b	c	d	e
33. I know the meaning of lots of words.	a	b	c	d	e
34. I usually think carefully about what I've got to do.	a	b	c	d	e
35. I know how to solve the problems that I meet.	a	b	c	d	e
36. I find a lot of schoolwork difficult.	a	b	c	d	e
37. I'm clever.	a	b	c	d	e
38. I know how to be a good learner.	a	b	c	d	e
39. I like using my brain.	a	b	c	d	e
40. Learning is difficult.	a	b	c	d	e

Part Two

Please write comments on the following topics in the space provided.

The study skills course has helped me to

The study skills course has not helped me to

Other comments

Rate the different modules, with a score out of 10, where 10 is very useful and 1 is not at all useful.

Memory skills:

Muscle reading:

Mind mapping:

Column notes:

Thinking skills:

Thank you very much for your help